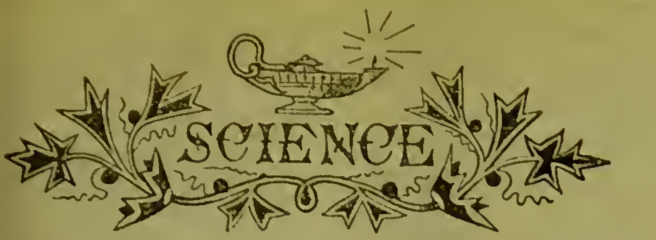

THE
HEMISTRY OF THE PHARMACOPŒIA
ACCORDING TO MODERN THEORIES.

BY JOHN CARGILL BROUGH.

IV.

HE numerous chemical compounds of the British Pharma-pœia may be distributed, according to their molecular ructure, into a comparatively few well-defined groups. In e present section I propose to examine the binary compounds mparable to chloride of hydrogen or hydrochloric acid, a dy which I have brought under the notice of the reader as e of the four primary molecular types recognised by odern chemists.

Hydrochloric Acid, HCl. (Hydric chloride, Chlorhydric id). This is the only known compound of the univalent ements chlorine and hydrogen. The ponderal and volu-etric relations of its constituents may be thus expressed :—

$$\begin{array}{ccccc} H & + & Cl & = & HCl \\ 1 & + & 35.5 & = & 36.5 \\ \square & + & \square & = & \square\square \end{array}$$

ure hydrochloric acid is a colourless gas, having a strong id taste and a pungent odour. It is extremely soluble in ater, and unites with the moisture of the air, forming white mes.

The *Acidum hydrochloricum* of pharmacy is a solution of the in distilled water. The specific gravity of the B. P. acid 1.17. According to Ure this is the specific gravity of a lution containing 34.25 per cent. of HCl. The gas is pre-red by the action of sulphuric acid, H_2SO_4, on sodic loride (common salt) NaCl, thus :—

$$H_2SO_4 + NaCl = HNaSO_4 + HCl.$$

The reaction expressed by the above equation is an illus-ation of *double decomposition*. The atom of sodium in the olecule of sodic chloride is transferred to the molecule of lphuric acid in exchange for an atom of hydrogen, and two w compounds are produced,—an acid salt called hydro-lic sulphate, $HNaSO_4$. and hydrochloric acid gas, HCl.

The univalent elements, bromine and iodine, unite with drogen, producing gaseous compounds respectively called drobromic and hydriodic acids, each strikingly analogous hydrochloric acid, and manifestly constructed on its type. e formulæ of the three acids and of the salts which may derived from them, by the substitution of potassium for drogen, are given in the accompanying table :—

Acids.		Potassium Salts.	
Hydrochloric	H Cl	K Cl	Chloride
Hydrobromic	H Br	K Br	Bromide
Hydriodic	H I	K I	Iodide.

These formulæ disclose the analogous construction of acids d salts. All true acids are simply *salts of hydrogen*, and directly comparable to the metallic salts derived from m. The acids mentioned above may therefore be correctly ed chloride, bromide, and iodide of hydrogen. Hydro-mic and hydriodic acids are not articles of the Pharma-œia, but they are highly important members of the emical family we are now considering.

METALLIC CHLORIDES, IODIDES AND BROMIDE.

In the British Pharmacopœia we find eleven metallic orides, four iodides, and one bromide. The formulæ of se bodies, according to the modern atomic weights, are en in the following table :—

	Chloride.	Iodide.	Bromide.
Sodic	$Na\,Cl$		
Potassic	—	$K\,I$	$K\,Br$
Mercurous	$Hg\,Cl$	$Hg\,I$	
Mercuric	$Hg\,Cl_2$	$Hg\,I_2$	
Calcic	$Ca\,Cl_2$		
Barytic	$Ba\,Cl_2$		
Zinc	$Zn\,Cl_2$		
Stannous	$Sn\,Cl_2$		
Ferrous	—	$Fe\,I_2$	
Ferric	$Fe\,Cl_3$		
Antimonious	$Sb\,Cl_3$		
Auric	$Au\,Cl_3$		
Platinic	$Pt\,Cl_4$		

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The sodic, potassic, and mercurous compounds are formed on the type of the single molecule of hydrochloric acid HCl, but the other compounds, containing bivalent, trivalent, and quadrivalent metals are formed on the multiple types H_2Cl_2, H_3Cl_3, and H_4Cl_4. We will now consider these bodies separately.

Sodic Chloride, NaCl. (Chloride of sodium, common salt; *Sodii chloridum*, B. P). Sodium ($Na' = 23$) is a univalent metal or monad; in other words, it is capable of replacing hydrogen atom for atom. Its chloride may therefore be derived from a single molecule of hydrochloric acid, thus :—

$$\begin{array}{ccccccccc} HCl & + & Na' & = & Na'Cl & + & H. \\ 36.5 & + & 23 & = & 58.5 & + & 1. \\ \text{(2 vols.)} & & & & & & \text{(1 vol.)} \end{array}$$

The relative weights of the reacting bodies and products, together with the volumes of those that are gaseous, are of course implied in the symbolic equation, and might have been deduced from it by the reader.

Potassic Iodide, KI. (Iodide of potassium; *Potassii iodidum*, B. P.) This important medicinal salt may be looked upon as a derivative of hydriodic acid, HI, the univalent metal potassium ($K' = 39$) being substituted for hydrogen. A process for preparing the salt, by the action of iodine on potassic hydrate, KHO, is given in the second part of the Pharmacopœia. When iodine is added to a solution of potassic hydrate, iodide and iodate of potassium are formed according to the equation :—

$$6KHO + I_6 = 5KI + KIO_3 + 3H_2O.$$

Six molecules of potassic hydrate react with six atoms of iodine to produce five molecules of potassic iodide, one molecule of iodate, and three molecules of water. To reduce the iodate, KIO_3, to iodide, KI, the residue obtained by evaporating the solution is heated with a small proportion of charcoal.

Potassic Bromide, KBr. (Bromide of potassium; *Potassii bromidum*, B. P.) This compound may be derived from potassic iodide by the substitution of bromine for iodine, thus :—

$$KI + Br = KBr + I.$$

The Pharmacopœia process for preparing it is directly comparable with that prescribed for the iodide. By the action of bromine on potassic hydrate, bromide and bromate are produced, and by heating the mixed salts with charcoal the bromate is reduced to bromide.

Mercury ($Hg'' = 200$) forms two series of compounds, namely, the *mercurous* compounds in which it seems to play the part of a univalent metal, and the *mercuric* compounds in which it is manifestly bivalent. Thus, mercurous chloride (calomel) may be represented by the formula HgCl corresponding to that of sodic chloride, NaCl, but mercuric chloride (corrosive sublimate) must be represented by the formula $HgCl_2$. In the British Pharmacopœia the formulæ and definitions of the compounds of mercury are framed in accordance with the untenable supposition that the atomic weight of mercury is only 100.

Mercurous Chloride, HgCl. (Calomel; *Calomelas*, $\mathit{Hg_2Cl}$,[*] B. P.) From two volumes of calomel vapour, or from two volumes of hydrochloric acid gas, *one* volume of chlorine may be extracted. Hence calomel is represented by the formula HgCl corresponding to HCl. The Pharmacopœia process for preparing this compound depends on the reaction of *mercurous* sulphate and sodic chloride :—

$$Hg_2SO_4 + 2NaCl = Na_2SO_4 + 2HgCl.$$

The mercurous sulphate Hg_2SO_4 is formed in the first stage of the process by triturating moist mercuric sulphate $HgSO_4$ with mercury until metallic globules are no longer visible The calomel is separated from the other product of the reaction, sodic sulphate, by sublimation.

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[*] Chemical formulæ based upon the old atomic weights are printed in *italics*.

MERCUROUS IODIDE, HgI. (Green iodide of mercury; *Hydrargyri iodidum viride, Hg_2I*, B. P.) This compound resembles calomel in constitution. It is formed according to the officinal prescription, by rubbing together atomic proportions of mercury and iodine.

MERCURIC CHLORIDE, $HgCl_2$. (Corrosive sublimate: *Hydrargyrum corrosivum sublimatum, HgCl*, B. P.) From two volumes of the vapour of corrosive sublimate *two* volumes of chlorine may be extracted. Hence this chloride must be looked upon as a derivative of two molecules of hydrochloric acid, or H_2Cl_2, a single atom of bivalent mercury being substituted for the two atoms of hydrogen. "It is demonstrable," says Dr. Odling, "that the formula for corrosive sublimate, $HgCl_2$, in the old 'London Pharmacopœia,' is right, while that in the new 'British Pharmacopœia' is indisputably wrong. In the present state of knowledge, the matter no longer admits of any question whatever."[*] Mercuric chloride is obtained as a sublimate by heating an intimate mixture of *mercuric* sulphate and sodic chloride:—

$$HgSO_4 + 2NaCl = Na_2SO_4 + HgCl_2.$$

In the Pharmacopœia process a small proportion of black oxide of manganese is heated with the reacting bodies, to prevent the formation of calomel from any mercurous sulphate which may be mixed with the mercuric salt.

MERCURIC IODIDE, HgI_2. (Red iodide of mercury; *Hydrargyri iodidum rubrum, HgI*. B. P.) This compound bears the same relation to corrosive sublimate that the green iodide bears to calomel. It is obtained as a scarlet precipitate by mixing solutions of corrosive sublimate and iodide of potassium:

$$HgCl_2 + 2\,KI = HgI_2 + 2\,KCl.$$

Calcium, barium, and zinc are now regarded as bivalent metals or dyads, and their chlorides represented as dichlorides, on the type of the double molecule of hydrochloric acid, H_2Cl_2.

CALCIC CHLORIDE, $CaCl_2$. (Chloride of calcium; *CaCl*, B. P.) This is the only compound of chlorine and calcium ($Ca''=40$). It is named in the Appendix of the Pharmacopœia as an article employed in the preparation of medicines.

BARYTIC CHLORIDE, $BaCl_2$. (Chloride of Barium; *BaCl*, B. P.) This salt, which is named in the Appendix as an article employed in chemical analysis is the only chloride of barium ($Ba''=137$).

ZINC CHLORIDE, $ZnCl_2$. (Chloride of zinc; *zinci chloridum, ZnCl*, B. P.) In this salt, again, a bivalent metallic atom ($Zn''=65$) fixes two univalent atoms of chlorine. The relation which chloride of zinc bears to chloride of hydrogen is disclosed by the following equation, which represents the principal reaction of the Pharmacopœia process:

$$Zn'' + 2\,HCl = Zn''Cl_2 + H_2.$$

The object of the second part of the prescribed process is merely to free the product from iron and other foreign metals derived from the impure zinc.[†]

Tin ($Sn''''=118$) is a quadrivalent metal or tetrad, comparable to the non-metallic element, carbon. The normal chloride of tin or *stannic chloride* must, therefore, be represented by the formula $SnCl_4$. The appropriateness of this formula is evinced by the fact that four volumes of chlorine may be extracted from two volumes of the vapour of stannic chloride. There is, however, an inferior chloride of tin called *stannous chloride*, which is represented by the formula $SnCl_2$. A solution of this dichloride is described in the Appendix of the Pharmacopœia.

STANNOUS CHLORIDE, $SnCl_2$. (Dichloride of tin; *chloride of tin, SnCl*, B. P.) The solution of this salt is used for testing, and is prepared by the action of dilute hydrochloric acid upon granulated tin:

$$Sn + 2HCl = SnCl_2 + H_2.$$

Iron ($Fe''=56$) like mercury, forms two series of compounds. In the normal or *ferrous* compounds it is bivalent, like zinc, but in the *ferric* compounds it appears to be triv lent, like aluminium.

FERROUS IODIDE, FeI_2. (*Ferri iodidum, FeI*, B. P.) Th compound is prepared according to the directions of t Pharmacopœia by the direct action of two atomic proportic of iodine and one atomic proportion of iron. Ferrous chlori $FeCl_2$ is not mentioned in the Pharmacopœia.

FERRIC CHLORIDE, $FeCl_3$. (*Ferri perchloridum, Fe_2C* B. P.) This salt is officinal in the form of an aqueous so tion, *Liquor ferri perchloridi*. In the prescribed proces preparing it, ferrous chloride $FeCl_2$ is first formed by action of iron on hydrochloric acid, thus:

$$Fe + 2HCl = FeCl_2 + H_2.$$

In the second part of the process, nitric acid HNO_3 rea with the ferrous chloride and undecomposed hydrochl acid, producing ferric chloride, water, and nitric oxide thus:

$$3FeCl_2 + 3HCl + HNO_3 = 3FeCl_3 + 2H_2O + NC$$

By some chemists the molecule of ferric chloride is re sented by the complex formula Fe_2Cl_6.

Antimony ($Sb'''=122$) combines with chlorine to for pentachloride $SbCl_5$. Its normal chloride, however, is re sented by the formula $SbCl_3$.

ANTIMONIOUS CHLORIDE, $SbCl_3$. (Trichloride of Antim *Antimonii terchloridum*, B. P.) This is obtained in solu by the reaction of trisulphide of antimony Sb_2S_3 and hy chloric acid:—

$$Sb_2S_3 + 6HCl = 2SbCl_3 + 3H_2S.$$

By the double decomposition of one molecule of the sulp and six molecules of the acid, two molecules of antimor chloride and three of sulphuretted hydrogen are prod The chloride thus obtained is dissolved in excess of h chloric acid to form *Liquor antimonii terchloridi*.

AURIC CHLORIDE, $AuCl_3$. (Trichloride or terchlorid gold). Gold ($Au'''=196{\cdot}5$) combines with chlorine i proportion of one atom to three atoms. This trichl which is used in solution for testing, is prepared by the a of aqua regia on the metal.

PLATINIC CHLORIDE, $PtCl_4$. (Tetrachloride of plati *Bichloride of platinum, $PtCl_2$* B. P.) Platinum ($Pt''''=$ is a quadrivalent element or tetrad. This compound is t fore its normal chloride. It is used in qualitative analys is prepared by the action of aqua regia on platinum foil

ON PHARMACEUTICAL HERBARIA.[*]

BY DANIEL HANBURY, F.L.S., ETC.

THAT the well-educated pharmaceutist should possess tain familiarity with the plants employed in medicin especially with those indigenous to his own countr proposition upon which there can scarcely be any diff of opinion. The effort of mind and habits of obse brought into requisition, in order to obtain such know are in no small degree beneficial; while the agreeable niscences called forth by an inspection of the plants ga in years long passed are such as may well repay the of forming and preserving an herbarium.

But it is not the formation of a general herbarium, of an herbarium of British plants, interesting and though they are, that I venture now to advocate. rather to point out the advantage to the student of b to consult a small collection of medicinal plants pres herbarium form, and to draw attention to the ease wit such a collection may be formed. One of the reg imposed by a paternal but despotic Government on t tinental apothecary is, that he shall provide and mai good order, for the use of his apprentices, an herb medicinal plants. Let us draw a lesson from this. British Pharmacopœia, about 170 plants are enume furnishing the vegetable materia medica presc that work; and of this number more than fifty ar indigenous to, or are cultivated in, Great Britai herbarium comprising even four-fifths of this numb be no unimportant aid to the student who was "read a subject so uninviting to most as materia medica. not, however, restrict my herbarium to the plant

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[*] "Lectures on Animal Chemistry."

[†] The action of the chlorine and carbonate of zinc will be explained in a subsequent article under the head of "Zinc Sulphate."

[*] Read at the last evening meeting of the Pharmaceutical

Pharmacopœia. There is a considerable number that are used in rustic medicine, some of which were held officinal by the London College of Physicians but a few years back. As instances of this, let me enumerate wood-sorrell, sweet flag, garlic, marsh mallow, asarabacca, bistort, bitter cress, lesser centaury, quince, carrot, black hellebore, elecampane, lettuce, bay, common mallow, horehound, pennyroyal, wormwood, buckbean, tormentilla, and coltsfoot. To this number may be added with advantage certain plants which are interesting to the pharmaceutist from their liability to be confounded with others that are officinal, as pyrethrum and matricaria, which may be mistaken for chamomile; fool's parsley supposed sometimes to do duty for conium, hawkbit, and hamnus frangula, which, it is said, have been passed off for dandelion and buckthorn.

As to exotic medicinal plants, the difficulty of obtaining pecimens would, I must admit, be far greater, and the pharaceutical herbarium must inevitably contain many blanks. till, as the Pharmaceutical Society numbers over forty embers resident in foreign countries, it would not, I believe, e impossible to interest some of them in procuring and orwarding to our secretary specimens for distribution of ome of the commoner economic plants occurring in their espective districts. In this way our pharmaceutical herariums might be enriched with such tropical plants as the love, cinnamon, allspice, cassia fistula, pareira brava, uassia, etc.

One of the more complete herbaria of the character I have ttempted to describe ought to be preserved at Bloomsbury-quare, and others in the rooms of the branch societies at dinburgh, Liverpool, etc.; but in addition, I would suggest those who feel, or wish to feel interested in botany to ommence themselves the formation of an herbarium of edicinal plants, taking as a nucleus those commonest plants f our gardens, fields, hedge-rows, and commons, the cherry-urel, lavender, dandelion, bittersweet, elder, foxglove, etc.

It is unnecessary here to describe the simple operation of reparing botanical specimens—an operation for which a harmaceutist has several facilities; but a few words may be id on the best method of mounting them, so as to render em at once convenient for reference, and as little liable as ssible to sustain injury from handling, and from the depretion of insects. In the first place, it should be a rule that specimen should be mounted unless previously brushed er with an alcoholic solution of corrosive sublimate—a ecaution against the ravages of a certain mischievous little etle, extremely ready to prey on dried leaves. Specimens ving been subjected to this operation should be re-dried, ith slight pressure, and are then ready to be fastened to the per on which they are to be ultimately preserved. This ay be done simply with short, narrow strips of paper, mmed or glued, so as to hold down the stems and more ominent parts. Specimens thus fastened can be readily moved, when it is desirable to replace them by better; but r an herbarium that is to be frequently handled, and by hers than its owner, it is preferable to resort to a method attaching specimens still more secure; and this is conniently effected by the use of common glue, brushed while t over at least a portion of the specimen. Strips of gummed per may be conveniently used, in addition, for the better curing of woody stems, roots, bulbs, and such like. The per on which specimens are mounted should be good and ut, and in oblong pieces, measuring about 17 inches by 10. e usual method of putting by mounted specimens is to ce them loose in brown paper covers, which are afterwards anged, one above another, in the pigeon-holes of a cabinet. r an herbarium specially pharmaceutical, comprising, as it essarily would, but a limited number of specimens, a large k, made so as to open flat, would probably be even more venient than the ordinary loose sheets in covers. The cimens would be retained in proper sequence, and be more npact and manageable than if upon separate sheets. Some ll-arranged volumes of this kind would afford much of the efit to be derived from engraved figures; in fact, in many es, the examination of an actual specimen is far more ressive and informing than the inspection of a plate. The hors of the British Pharmacopœia have carefully mened in what works figures may be found of the several nts enumerated in that volume. The number of works s referred to is twenty-six; many of them are of great ty, and quite inaccessible to the majority of persons who would wish to consult them, while to purchase the whole series a sum would be required approaching £230.

I trust I have said sufficient to show that the formation of herbaria of medicinal plants is a subject that merits some attention at the hands of the Pharmaceutical Society.

VARIA.

A Paper "On Magnesium," by Professor Wanklyn and Mr. E. T. Chapman is printed in the last number of the *Journal of the Chemical Society.* By dissolving known weights of the metal in certain dilute acids, and determining the quantities of hydrogen evolved, the authors have found that the magnesium sold in the form of ribbon for the exhibition of the magnesium light is remarkably pure. With mercury, magnesium forms an amalgam, endowed with very singular properties. To obtain this amalgam, magnesium is heated with mercury nearly to the boiling point of the latter, whereupon combination takes place, attended with very violent action, somewhat like that between mercury and sodium. The authors found that an amalgam, containing only one part by weight of magnesium to two hundred parts of mercury, would tarnish instantly on exposure to the air, and would decompose water when immersed in it far more rapidly than a sodium-amalgam, containing twice as much sodium.

It is perhaps not generally known that the French prize of 50,000 fr. for "the most important application of the voltaic pile to industrial purposes" is open to all nations. Competitors' names will be received at any time within five years from the date of the decree (April 18th), and the claims will be examined by a commission appointed by the Minister of Public Instruction.

Kachler has shown that in the zincblende of Schönfeld, near Sehlaggenwald, the new metal *indium* is associated with tin and other metals in sufficiently large quantity to be extracted therefrom to the extent of several grammes. The blende is calcined; it is dissolved in sulphuric acid, and the solution is treated with metallic zinc; the indium is then precipitated, mixed with other metals, which are eventually separated.

F.R.S.—The Council of the Royal Society recommend the following gentlemen for election to the Fellowship:—J. C. Bucknill, M.D.; Rev. F. W. Farrar; W. A. Guy, M.B.; J. Hector, M.D.; J. W. Kaye; Hugo Müller, Ph.D.; C. Murchison, M.D.; W. H. Perkin; Archdeacon Pratt; Captain G. H. Richards, R.N.; T. Richardson, W. H. L. Russell, Rev. Dr Selwyn, R. Townsend, and H. Watts, B.A.

THE MONTH

UNITED SOCIETY OF CHEMISTS AND DRUGGISTS

EXECUTIVE COMMITTEE MEETING

The monthly meeting was held at the offices of the Society, on Thursday, the 4th inst., present, Messrs. Anderson, Baumgarten, Buott, jun., Boor, Bicknell, Cawdell, D'Aubney, Heppell, King, Pass, Wade, Whincup, and Kruman. Progress was reported by the Registrar, and during the current business transacted it was agreed that the annual meeting should, in compliance with the wishes of many country members, be held as soon after the middle of July as could be found to be practicable.

In accordance with the instructions of the committee the following letter has been forwarded to the Pharmaceutical Society:—

United Society of Chemists and Druggists,
20, New Ormond-street, W.C.
London, May 5, 1866.

Sir,—At a meeting of the Executive Committee of this Society, held here yesterday, reference was made to a letter of the President of the Pharmaceutical Society, dated March 17, 1866, and addressed to the President of the United Society of Chemists and Druggists, in which the President of the Pharmaceutical Society says—"I regard the union of all men of one calling as an important means for elevating the standing of the whole body;" and in the "Pharmaceutical Journal" for this month, in which this letter is printed, a hope is expressed "that those equally and alike interested in the result of legislation will not be found acting in opposition to each other."

The sentiments thus expressed were reciprocrated by the meeting, and led to the unanimous adoption of the accompanying resolution.

Waiting the reply of the Pharmaceutical Council to the inquiry therein embodied,

I am, sir, your obedient servant,
Cyrus Buott, Secretary.

Mr. Elias Bremridge, Secretary,
Pharmaceutical Society, Bloomsbury-square.

RESOLUTION.

That the Secretary be instructed to write to the Council of the Pharmaceutical Society, requesting a reply to the question, Will the Council of the Pharmaceutical Society cooperate with the Executive Committee of the United Society in promoting a Bill for the Incorporation of the trade, based upon the recommendation of the Select Committee of the House of Commons?

Cyrus Buott, Secretary.

LAW AND POLICE.

DISMISSAL OF AN ASSISTANT.—AMITAGE *v.* BORDASS.

In this case, which was tried at the Driffield County Court on the 16th ult , the question at issue was whether the defendant, having by letter engaged the plaintiff to serve him "at a salary of 20*l.* per year for the first half-year, and 25*l.* for the second half-year," could dismiss him by a month's notice; nothing having been said in the letter as to the power of determining the contract. Mr. G. Hodgson appeared for the plaintiff, and Mr. David Hornby for the defendant. Mr. Hodgson contended—1st, that there was no custom in the trade to dismiss by a month's notice; and 2nd, that even if there was such a custom, as the engagement was for a year, and as there was a written agreement, the defendant could not set up the custom. Mr. Hornby called witnesses who clearly proved the custom, and then argued that parol evidence of the custom or usage of particular trades might always be adduced to *annex* incidents to written agreements, provided there was nothing in such customs *repugnant to or inconsistent* with the written agreement; that in the present case the custom set up was perfectly consistent with the agreement, and no intention was apparent on the face of the agreement to exclude the custom, hence it became part of the agreement. He cited the cases of *Parker* v. *Ibbetson*, 27 L.J.C.P. 236, and *Mentzner* v. *Bolton*, 9 Ex. 518, which were almost identical with the present case.

Verdict for the defendant.

ATTEMPTED SUICIDE BY SULPHATE OF ZINC.

At the Southwark Police Court on the 4th inst., Thomas Dennis, described as a bootmaker, was charged with attempting to commit suicide by swallowing a quantity of white copperas. Mrs. Mary Toomey said the prisoner had for some time lodged at her house at Crosby-row, Bermondsey. He was single, and had for some time kept company with a young woman in the neighbourhood. About four o'clock on the previous afternoon he came home very much excited and asked the servant for some warm water. The witness, hearing him call for it, asked him if he wanted his tea. He replied that he did not, but he required the warm water, and then he went upstairs. A few minutes after that she ascertained he had been supplied with a glass of water, and, having some suspicion as to his intention, she ran upstairs and entered the prisoner's room just as he was putting some powder into a glass, and before she could reach him he took it up and swallowed the contents, saying "Good-bye, good-bye." The witness immediately called in a neighbour, who fetched a constable, and he was taken to Guy's Hospital. He had been drinking a little, but she had no doubt that he was driven to desperation by the young woman with whom he had kept company for a very long time. They were to have been married on the previous morning. When the time arrived for their going to church the bride ran away, and refused to have him. In answer to the charge, the prisoner said he was extremely sorry for what he had d The stuff he took he used in his business, and in the exc ment, after being so cruelly treated, he hardly knew wha was about. The landlady said he was generally a very st and industrious man, and she did not think he would re such an offence. Mr. Burcham, after suitably admonis the prisoner, ordered him to be discharged, and he left court with the landlady.

ANATOMICAL MUSEUMS.—YOUNG *v.* HAMILTON.

This case was tried before Mr. Justice Mellor, in the Court, on the 16th ult. The action was brought to rec compensation for impaired health, in consequence of defendant falsely representing that he was a regular do and thereby inducing the plaintiff to employ him as a me man. In the other counts it was alleged that the defen had carelessly and negligently treated the plaintiff, and guaranteed to cure him of a disorder under which suffered. The plaintiff, an agricultural labourer, who saved a little money, visited an anatomical museum Oxford-street, and was persuaded by the defendant, described himself in a "Guide to Health" as " Hamilton, M.D., Doctor of Medicine and Surgery, Lect on Physiology, Accoucheur, and author of the *Botanic and Family Physician*," to submit to his treatment. He at first £5 5s., and then £6 6s., and the defendant, st that he had under-estimated the case, and should charged any one but a poor man between £40 and wanted to obtain a further sum of £9. The plaintiff went to Mr. O'Donohue, a regular practitioner in Westminster-bridge-road, and some two months el before the ill effects of the defendant's treatment coul eradicated. The poor fellow had been salivated, and ren incapable of earning his livelihood by his daily labour fo space of several months, besides having to pay £10 fo necessary medical aid which his state of health required

The jury found a verdict for the plaintiff—Damages £

DIVORCE CASE.—FEATHERSTONE *v.* FEATHERSTONE AN JEREMY.

This case was tried on the 3rd inst. The petitioner chemist, and he married the respondent in December, After living together in different parts of England they to Canada in 1857, and the respondent was there guil adultery. The petitioner then sent her home to her f in England, making a suitable provision for her. Sh since committed adultery with the co-respondent, wh said to be employed at a theatre. Decree *nisi.*

GOSSIP.

The President, Vice-President, and Council of the maceutical Society have issued invitations for a convers. to be held this evening (May 15th), at 17, Bloomsbury-s A full account of the proceedings, with a list of the exhibited, will appear in our next.

Mr. Thomas Wilson has retired from the firm of Ma Wilson, chemists and druggists, Bradford. All claims the firm will be discharged by Messrs. T. Harrison Parkinson, who will continue the business on thei account.

John Tilly, chemist and druggest, Cheltenham, ha an assignment of his estate. Trustees, Miss E. Bi Leamington, and Mr. J. Williams, Cheltenham.

Mr. G. Simpson has retired from the firm of Si Maule, and Nicholson, manufacturing chemists, Atlas Lock's Fields, Newington. Messrs. G. Maule and Nicholson will continue the business in their own nam

The creditors of H. J. Bellingham, chemist and dr Anerley-road, Norwood, have agreed to accept a comp of two shillings in the pound. Trustee, Mr. W. accountant, Trinity-square, Southwark.

Mr. G. Johnson has retired from the firm of Johns Sons, chemists, 18A Basinghall-street, London. The b will be continued by Messrs. G. R. Johnson and J. G son, under the same style as before.

Mr. Jonathan Morton will in future conduct, on account, the business of manufacturing chemist, Moor, Huddersfield, hitherto carried on in partnersh Mr. Joshua Morton.

The business of arrowroot merchant, which has been carried a for the last half-century by Mrs. A. S. Plumbe, is now onducted by her son, Mr. Henry Martyn Plumbe.

A. S. Duncan and J. S. Campbell, both of the Albion orks, Old Ford-road, Middlesex, manufacturing chemists, arrying on business as the firm of Duncan, Campbell, and o., have executed a composition deed, whereby they covenant to pay to the trustees the sum of £50 down, and a sum money sufficient to pay all their creditors a composition of . in the pound.

A dividend (which it is to be presumed may be taken as a al one) of 1·90th of a 1d. has been declared in the Bristol istrict Court of Bankruptcy, in the estate of S. Cox, manucturer of chemicals, of Netham, near Bristol. The bankptcy took place under the Consolidation Act of 1849, and ere have been three previous dividends of 8d., 1d., and 8th of a 1d. The sum now divided was £2 1s. between editors whose debts amounted to about £45,000.

Evidence is being taken by the Select Committee of the ouse of Commons, appointed to consider the important estion of the health of the forces as affected by preventable seases.

The Lords of the Committee of Council on Education have ceived a communication from Her Majesty's Secretary of ate for Foreign Affairs, announcing the opening of an dustrial Exhibition at Stockholm, on the 15th of June xt, showing the progress in art and industry in Sweden, rway, Denmark, and Finland; and requesting that the oposed Exhibition may be announced in England.

The Bill laid before Parliament by Mr. Holland, imposes a nalty upon any one who, not being a member of the Royal llege of Veterinary Surgeons, shall assume the title of terinary surgeon; but the Bill is not to affect persons who ve assumed the title six months before passing of the Bill.

A boy, aged four years and a half, suffering from retention, s made to inhale chloroform at the University Hospital of rlin, to facilitate catheterism. In two or three minutes piration ceased, and all means of resuscitation failed.

On the morning of Friday, the 20th ult., a domestic vant, 15 years of age, in the employ of Mr. Boulton, emist, Rotherham, attempted to destroy herself under newhat singular circumstances. It appears that she had n in the habit, early in the morning, before her master l mistress were astir, of admitting her lover into the use, the youth scaling a wall and reaching the back-yard. . Boulton, hearing of the youth's secret visits, got up lier than usual on Thursday morning, and caught the ing pair together. The young fellow beat a hasty retreat, l the girl was remonstrated with on the impropriety of conduct, with which it was threatened her mother, who d at Sheffield, should be acquainted. This threat, toger with the interruption of the course of love, depressed girl's spirits. She rose early on Friday morning, gained top story of a warehouse at the rear of the premises, feet high, with the design of throwing herself down. tunately her movements were watched by a man who, icipating her attempting the rash act, got into the yard . succeeded in catching the girl in his arms, from which, vever, she slipped, and fell on the ground, severely uring herself, though not dangerously.

n inquest was lately held on the body of Joseph Wells, l 14, lately in the employ of Mr. Burrowes, builder, of ham. The deceased took a bottle and swallowed a ion of its contents, which proved to be vitriol. Carbonate da was administered, with a view to neutralise the effect he poison; but deceased gradually sank and expired. lict—Accidental death.

great novelty has just been introduced by one of the ing Dublin hospitals. The managers of St. Vincent's pital, Stephen's-green, have purchased the splendid lence known as Lyndon Castle, Blackrock, for the pose of converting it into a sanatorium to which they send the convalescent patients to enjoy the benefit of ntry air, sea-bathing, etc., previous to returning to their es. This is the first sanatorium ever established in and. The example is well worthy of imitation, for there ther hospitals in Dublin which, from their less favoursituation as to pure air, require such an appendage h more than St. Vincent de Paul's.

t Wednesday evening, between 8 and 9 o'clock, an ing fire occurred on the premises of Messrs. Tylor and Pace, lucifer-match manufacturers, at Bow-common, and did an enormous amount of damage before it could be extinguished, especially to the property on which it originated, to the stock, chiefly petroleum, of a neighbouring manufacturer, and to a less extent to five adjoining manufactories, containing inflammable materials. The alarm was received at the head-quarters of the metropolitan fire-brigade in Watling-street at a quarter to 9 o'clock, and forthwith Captain Shaw, the chief of the brigade, hastened to the scene, with all the available men and engines at his disposal there, leaving others to follow from the various district stations. In all, six steam fire and two hand engines, with about 60 men, were brought into requisition, but in spite of all their exertions about 1,600 barrels of petroleum, belonging to Mr. Crossley, oil refiner, and four barges in an adjoining canal, were destroyed; a warehouse and machine-room, each about 100 feet by 30 feet, in the occupation of Messrs. Tylor and Pace, were also burnt, with the contents; the roof of a shed and two stacks of bones in an open yard, belonging to Mr. W. Settles, animal charcoal manufacturer, were damaged, and about 90 feet of fence owned by Messrs. Blott, naptha and pitch manufacturers, in Crisp-street, Poplar New Town, and by Messrs. Engert and Rolfe, asphalte and felt manufacturers, in the same locality. The stock and materials of Messrs. Denton and Jutsum, oil refiners, are also reported to have been damaged more or less by removal. The property in which the fire originated was not insured. Being a lucifer-match manufactory, it would be, probably, more correct to state that it was not insurable.

The quantity of bones imported into the United Kingdom continues very considerable. In March the total imports were 6,051 tons, as compared with 4,142 tons in March, 1865, and 4,508 tons in March, 1864. In the first three months of this year the aggregate imports were 12,472 tons, as compared with 7,850 tons in 1865, and 14,424 tons in 1864 (corresponding periods). Liebig, the great chemist, asserted recently that all Europe was ransacked to supply England with bones.

An inland revenue return shows that in the year ending at Michaelmas, 1865, 5,910,769 lbs of sugar were consumed in breweries, 4,224,166 lbs in London, and 1,686,603 lbs in the provinces. The consumption in Scotland was 200,799 lbs: in Ireland, 81,175 lbs.

The Bill on Sunday trading introduced by Lord Chelmsford is now under discussion. It is proposed only to apply to England, and to take effect on the first of October. The exceptions to which the measure is not to apply were mentioned on Thursday, and several meetings have been held against the provisions. The preamble states that the practice of Sunday trading prevails extensively in various parts of England, and the law is insufficient to prevent the same. The present penalty is 5s. for an offence, and the object of the Bill is to increase it to 20s. and to not less than 5s. for the first offence. For a second, or subsequent offence, the penalty may be increased to 40s., and not less than 20s. The police are to enforce the provisions, and the fines to be paid over in aid of the police force in the metropolis or elsewhere. All prosecutions under the intended Act are to be commenced within seven days of the commission of the offence against the law. The Bill is not to apply to the selling, offering, or exposing for sale or delivery of any article or thing for medicinal purposes, nor to the delivery of any meat, fish, poultry, game, or vegetables before the hour of 9 o'clock in the morning; nor to the selling, offering, or exposing for sale or delivery any milk or cream before the hour of 10 o'clock in the morning, or after the hour of 1 o'clock in the afternoon; nor to the selling, offering or exposing for sale, without public cry, of any pastry, fruit, or any beverage which may lawfully be sold without a licence, before the hour of 10 o'clock in the morning and after 1 o'clock in the afternoon; nor to the selling, offering, or exposing for sale, without public cry, nor to the delivery, of any periodical publication before the hour of 10 o'clock in the morning; nor to the exercise of the ordinary business of the keeper of a cook-shop, eating-house, or coffee-house before the hour of 10 o'clock in the morning and after 1 o'clock in the afternoon; nor to the exercise of the ordinary and lawful business of a baker, licensed victualler, or keeper of any inn, tavern, hotel, or publichouse licensed for the sale of beer or excisable liquors.

Mr. A. A. Jaeger, chemist, Neilston, near Glasgow, has introduced a new process for obtaining aniline yellow and red.

GAZETTE.

BANKRUPTS.

Billing, John Henry, Manchester, surgeon.
Boyce, A., Theberton-street, Islington, chemist.
Brown, John, Appleby, chemist.
Burrows, R. T., Westbourne-park-place, Westbourne-park-road, surgeon.
Bursey, Henry, Newbury, Berkshire, surgeon.
Dyer, Henry, Hen and Chicken-lane, Old Kent-road, and Walworth, manufacturing chemist.
Jackson, Robert, Wolverhampton, chemist.
Moon, W. C., Sunderland, druggist.
Mullar, Frederick George William, Oxford-road, Kilburn, surgeon.
Owen, James, Wellington, Shropshire, chemist.
Poland, John, late of Great Portland-street, Oxford-street, dealer in perfumery.
Steel, S. G., and Pearson, R., Brandon-street, Walworth New-town, wholesale druggists.

PARTNERSHIPS DISSOLVED.

Bisshopp, J., and Cook, J., M.D., Lawn place, South Lambeth, physicians.
Butcher, W., and Co., Woolwich, homœopathic chemists.
Gaye, C., and Gaye, H. S., Newton Abbot, Devonshire, surgeons.
Highmore, N. and W., Sherborne, Dorset, surgeons.
Hornby and Elliott, Sheffield and Attercliffe, manufacturing chemists.
Lano, J., and Walls, W., Manchester, surgeons.
Maud and Wilson, Bradford, Yorkshire, chemists; as far as regards T. Wilson.
Monks and Aubin, Arbour-terrace, Commercial-road, surgeons.
Morton, J. and J., Huddersfield, manufacturing chemists.
Rendle and Carpenter, Walworth-road, surgeons.
Sharp and Davis, Liverpool, outfitters.
Simpson, Maule, and Nicholson, Fenchurch-street, and Locksfields, Newington, Surrey, manufacturing chemists; as far as regards George Simpson.
Todd, B., and Balkwill, A., Perranarworthal, Cornwall, arsenic manufacturers.

SCOTCH SEQUESTRATION.

M'Vitie, H. M. W., Edinburgh, doctor of medicine.

PROFESSOR HUXLEY ON THE RELATION OF PHYSICAL SCIENCE TO MEDICAL EDUCATION.

The following is the substance of an address delivered by Professor Huxley at the annual distribution of prizes at St. Mary's Hospital medical school:—

Professor Huxley said that he had hardly clearly apprehended at first that a certain gravamen attached to the honour of presiding, in the shape of an address. After a brief introduction, he proceeded to speak of the relations of the physical sciences to medicine and medical education. He defined the object of the science of medicine as being to ascertain the nature of the disability which a diseased person labours under, and the means by which that disability can be removed; and, correlatively, the art of medicine as the skilful use of all those means by which we can ascertain what is the matter with the diseased man and their application to his cure. One great division of these means was derived from, or in its use dependent upon, the physical sciences. The microscope, the ophthalmoscope, the stethoscope, chemical tests, and the other great and familiar means of diagnosis, were all physical appliances. Further than that, every liberally educated medical man should surely know something about the nature of the bodies which he is constantly employing. He should certainly, as a man of liberal education, know enough of botany and zoology to be on even terms with laymen, and give safe opinions and safe answers concerning the animal and vegetable substances which he uses constantly. He was quite prepared to admit, and indeed had always had a strong conviction, that there was something absolutely preposterous in the volume and bulk to which, for example, some of our treatises on materia medica extend, and the enormous quantity of absolutely irrelevant matter. He was not one who would take the student through the length and breadth of physical optics because there are particular substances used in medicine which change the polarisation of light or exhibit the phenomenon of fluorescence. This was the Scylla; total ignorance was the Charybdis.

But there was a more important aspect of the matter: the relation in which the science of medicine stands to physical science in general. The scientific man makes use of the data of physical science for the purpose of reasoning out the exact conditions of the case which he has before him, and for the purpose of applying the precise measures which are adapted to meet that case. Having this conception of what is meant by scientific medicine, what has to be done in medicine before we
shall reach this condition? For although, looking about us
surgical practice particularly, and perhaps in some few ca
in medicine, it would be possible to adduce instances of wl
he should call perfect medical science—that is to say, wh
you have a complete knowledge of the lesion, and a compl
knowledge of the conditions required to restore that lesi
yet these were among the rare cases presented to the physic
or surgeon. And in the majority of cases we had no s
complete knowledge. There was a wicked and libellous
story, in which it was said, by way of illustration of medi
practice, that in a diseased man nature and disease are as t
men fighting; and that the doctor is a blind man who co
with a big stick, and hits hard, and sometimes hits the dise
and sometimes hits nature. If he might modify the st
he should say that, in these days, the physician is not bli
but, on the contrary, is a remarkably sharp sighted, ac
painstaking, and conscientious person; but that he finds h
self in a very dim twilight; and that, having ascertained
the light is very uncertain, and very apt to vary, he rat
as a conscientious person, abstains, as far as possible, f
using his club, and confines himself to what, if he might
so without offence to that company, was known as the pa
a judicious bottle-holder—ready to pick up nature when
she gets exhausted, and bring her up to time. That he
to be a fair description of the modern practice of physic;
no doubt it indicated a beneficent change satisfactor
patient and to the physician, who feels that his club is
stained by innocent blood. But this was not final; an
must all look forward to the physician attaining as cle
mental vision of the condition of a diseased part, and
means of relieving it, as the surgeon has in the plainest
of surgery. What the physician wants is more light.
wants a better light upon the arena of the fight, so th
may be able to remove the obstacles out of the way of na
and may be able, as occasion offers, to deal her oppone
severe blow, without the chance of doing her an injury.
light must come from the cultivation and improvement an
refinement in every way of those sciences which furnis
with the data for deduction—the abstract physical scien
anatomy, physiology, chemistry, physics, and so forth.

Upon a clear appreciation of this all our theories of n
cal education must eventually turn. Let it be granted
as he believed it must be, that a thorough groundin
physical science was the basis of all medical education.
was this attainable? One of the most experienced surg
in these islands had raised his voice against the immen
digestible mass of information crammed into the m
student now in the course of three years. Coming with
scintilla of a notion of anything about science, he wa
pected to learn physics, natural philosophy, chemistry, bo
zoology, comparative anatomy, human anatomy, histo
pathology, therapeutics, medicine, surgery, dietetics,
prudence. The thing was absurd. You might make
of intellectual *foie gras* of him; but you could not giv
information of the kind and scope which he ought to h
that time, and with the existing methods. They mig
taught to pass examinations. He was going to say he
teach a dog to pass an examination, or at least nine-ten
the examinations that men pass through; but they wou
acquire a knowledge of the facts from their own observ
and the only knowledge that is of the smallest use.
practical and purely professional subjects alone must
than fully occupy every minute of the three years of
What, then, was his meaning in dwelling on the eno
importance of physical science to students of medicine
held that all this acquaintance with the principles of p
and chemistry and biology, ought to have been acqu
the course of their general education. If those who re
education in this country had the smallest conception o
their real duties were, or of what the purposes of m
and the conditions of its progress at the present tim
they would give that knowledge; and those who wish
prove medical education must, to his mind, throw the
into that object; they must compel those who give us p
education to make physical science a very large cons
portion of that education.

It was the duty of every man to lift up his voice
the scandalous perversion of human time and human
under the system of gerund-grinding which now prev
schools. And, for the one particular purpose of
training, it was the duty of every one of us who h

ause at heart to endeavour to exercise such an influence that he medical teacher shall not have to commence upon a mere *abula rasa*, but that the young men who come up for medical ducation shall have been accustomed to acquaint themselves vith chemical formulæ and chemical reactions, shall have earnt the great distinguishing features of the different forms f life, and the broad facts of physiology, the elementary utlines of which might—he spoke from experience—be ught perfectly well to boys of ten years old. How much sier the task would then be, not only for the learner, but r the teacher; and how vastly greater would be the stride ade by every man towards that great goal already indicated, e establishment of a scientific medicine.

THE CATTLE PLAGUE.

the third and final Report of the Cattle Plague Commis- on which has just been issued, the measures proposed for ecking and curing the disease are considered. The first quiry is naturally directed to measures of disinfection, or, other words, to methods by which the poison may be stroyed. "To find a perfect disinfectant for the Cattle lague would be to stop the disease at once." The ecessary conditions for destroying a poison of the character question reduce the available disinfectants to four—lorine, ozone, sulphurous acid, and the tar acids arbolic and cresylic). From these, by experiment, Mr. rookes has selected the tar acids, combined with the casional agency of sulphurous acid, as the most effectual, d the Commissioners strongly recommend the use of rbolic acid throughout the country in uninfected as well as infected districts. The experiments hitherto made on the mbined action of carbolic and sulphurous acids are said to very encouraging. The Commissioners are anxious to ise no false hopes, but they think "that a fair case has been ade out for a large and systematic trial of similar measures." is earnestly to be wished that these hopes may be realized, r they would place in our hands at once a ready and fectual means of prevention, but a much larger series of periments will be necessary before we can presume with nfidence upon having achieved such a success. Another eans of prevention has been looked for in inoculation or ccination, but on this head the Commissioners can only nfirm the adverse verdict which has already been pro- unced. The plan has been tried in all forms, and in all has iled. There remains the question of treatment with a view cure; and, as respects this, also, the Commissioners can the most part only endorse the opinion which the public s already formed. All forms of medicinal treatment have en equally successful and equally unsuccessful. A tabular tement as to the results of four totally distinct methods of atment gives, as the percentages of recovery, figures which ly vary between 27 and and 25 per cent. The only infer- ce to be drawn is that the various drugs employed have oduced little or no effect. It is possible that their failure y arise from the fact that the drugs have not yet been ployed at a sufficiently early stage of the disease, but the mmissioners "wish they could say it is probable." mœopathy, injections into the veins and under the skin, alation of chloroform—all have been employed with the ne absence of effect. There is, however, one satisfactory ult amid this confusion. If medicinal treatment is of no ail, the regulation of diet has the greatest influence. It is de clear by the evidence of the Edinburgh Committee that proportion of recoveries is very largely increased "by licious feeding with soft mashes of digestible food." Under s treatment, out of 503 cases, 191, or nearly 38 per cent., overed. It is remarkable, moreover, that dividing these asts into two groups, according as they belonged to large or all stocks, in the former 22 per cent., while in the latter 62 r cent. recovered. The explanation offered is that in smaller eks fewer beasts are ill at once, there is less concentration of e poison, less crowding, and, not least, better nursing. An alysis of another group of 813 cases indicates still more nclusively the influence of feeding. Among cottagers' ttle, generally fed on mashed food, the recoveries were 73 r cent.; in large stocks where dry food was often given ring convalescence, the recoveries were 57 per cent.; with xed food of mashes and hay they were 22 per cent.; while ong cattle fed entirely with dry food, and treated medically with drugs, the recoveries were but 13 per cent. The number of cases is too small for us to depend on these averages; but they are sufficient to establish the general fact. We may take it as ascertained that "powerful drugs of all kinds greatly heighten the mortality of the Cattle Plague. . . . Perfect cleanliness, ample ventilation, constant disinfection of the air and discharges by tar acids, and the most careful feeding with soft mashes of the most digestible food,—such, and such only, are the measures which our present experience sanctions for the treatment of the disease." Such a conclusion is quite in accordance with the congested state of the stomach which has been observed after death, and the Commissioners believe that a similar restriction as to diet formed the most important part of Mr. Worms' method of cure.

MEDICATED PESSARIES AND SUPPOSITORIES.

The extended employment of these articles in the treatment of uterine disorders, and for the administration of medicinal substances by the rectum, has opened a new field for pharmaceutical invention. At the last evening meeting of the Pharmaceutical Society, Mr. H. B. Brady brought forward the results of his own labours in this field, and explained, with great minuteness, the various operations comprised in the preparation of medicated pessaries and suppositories. After the reading of Mr. Brady's elaborate and practical paper, which is printed at length in the Society's *Journal*, Mr. Daniel Hanbury called the attention of the meeting to a collection of pessaries and suppositories of various kinds, and very superior manufacture, exhibited by Mr. J. L. Bosley, of Brompton-road. We have now before us several samples of the articles made by Mr. Bosley, and unhesitatingly declare that they are the most elegant preparations of the suppository class that have come under our notice. The pessaries are shaped like the original Minnié rifle bullet, but are somewhat larger than that famous projectile, being about an inch and a quarter high, and three-quarters of an inch broad at the base. The suppositories are of a similar conical form, but are, of course, considerably smaller. The butter of cacao enters largely into the composition of these medicated cones, and may be recognised by its aromatic odour. This substance has great firmness when cold, and also a remarkably low melting point—the very qualities that are required in a suppository. The wax and lard basis of the two officinal suppositories is in many respects highly objectionable, and in every respect vastly inferior to cacao butter. Numerous medicinal substances, besides tannin and morphia, are now commonly administered by means of suppositories and pessaries. In Mr. Bosley's list we find the names of twenty-one medicaments for the former class of articles, and twenty-three for the latter. We understand that the superlative excellence of Mr. Bosley's medicated pessaries and suppositories is acknowledged by many of our leading physicians.

LATENT PHOTOGRAPHS.

We can remember the time when experimental chemistry was doomed to "blush unseen" in the back kitchen, "and waste its sweetness on the desert air" of an outhouse. Now, however, it flourishes in the drawing-room, producing Pharaoh's serpents, oxide of chromium tea, oleate of sodium soap bubbles, and many other wonderful things. Photography has lately been joined to drawing-room magic. You take two pieces of blank paper, and, after wetting one with water, you press it upon the other. The result of this simple operation is the magical development of a photographic picture. Mr. C. Jabez Hughes has just introduced a latent photograph that is developed into a coloured picture, by dipping it in water in which a little pinch of powder has been dissolved. The pictures we have examined are of a beautiful blue colour. The powder we used appeared to be ferridcyanide of potassium.

THE CHEMIST AND DRUGGIST

LONDON, MAY 15, 1866.

CORRESPONDENCE.—All communications should be addressed to the Editor, at 24, BOW-LANE, E.C.; those intended for publication should be accompanied by the real names and addresses of the writers.

QUERIES.—The Editor cannot undertake to attend to those which are anonymous, or to send answers through the post.

SUBSCRIPTION.—The subscription to the CHEMIST AND DRUGGIST is 5s. per annum, payable in advance. Should a receipt be required, a stamped envelope must be sent with the amount of subscription. A specimen number may be had upon application, price 6d.

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The CHEMIST AND DRUGGIST is published on the Fifteenth of every month, except when that date falls upon a Sunday, when it is published on the preceding day. It is regularly supplied direct to the Members of the Trade in Great Britain, Ireland, the Colonies, and all the principal seats of foreign commerce.

Everything intended for insertion in the current Month must be sent in before the 10th, except Employers' and Assistants' Advertisements, which will be received until 9 A.M. on the morning previous to publication.

A FRENCH VIEW OF THE PROPOSED LEGAL DEFENCE ASSOCIATION.

THE scheme proposed by Mr. BARNABY, of Rochester, for providing efficient legal defence in actions brought against chemists and druggists forms the subject of an amusing article in the Journal of the Bordeaux Society of Pharmacy. From an advertisement relating to the proposed association, which appeared in our columns, the writer calls forth the bugbear of Irresponsible Pharmacy to fright those reformers who are advocating the removal of some of the vexatious restrictions which are placed on the dispensing of medicines in France. As but few copies of the Bordeaux print reach this country we present our readers with a translation of this curious article:—

"In one of the recent numbers of our English contemporary THE CHEMIST AND DRUGGIST, we find a prospectus that may be profitably noticed, and set against the arguments of those who claim absolute liberty for Pharmacy. The substance of this prospectus is as follows:—

"Two thousand pounds for costs and damages have been paid by a chemist at Liverpool for accidental poisoning, and twenty-five analagous cases have been tried during the last two years. It is right to insure against such ruinous mischances. It is therefore proposed to form a society, every member of which paying an annual subscription not exceeding *ten shillings* will be secured against all costs, fines, or damages in cases of accidental poisoning or other misdemeanours connected with the calling of the pharmaceutist or druggist.

"Supposing that such a society is established, every pharmaceutist or druggist in Great Britain has but to belong to it to secure perfect peace of mind. If the members of this society make mistakes in the dispensing of their medicines, if they maim or poison their customers, it is no longer their business. Application must be made to the society for redr They do not trouble themselves about these small matte long as they pay their subscriptions regularly.

"The number of accidents will probably increase, but matters little. English pharmaceutists will enjoy one privilege, namely, that of poisoning the whole world for shillings a year.

"We are not so far advanced in France. Men of the w who, without understanding the question, beg for free t in Pharmacy, and the right for every one to dispense medi on the simple condition of repairing the injury don another, will perhaps retreat before such consequences. W other results could be expected? The right to pra pharmacy without qualification and regulation having given to each person, how can he be prevented from ciating with his brethren in order to dispel the dangers o profession for the trifling sum of ten shillings a year?"

EXHIBITION OF OBJECTS RELATING TO PHARMACY.

WE have much pleasure in calling the attention of our scribers to the following circular, issued by the Secret of the British Pharmaceutical Conference:—

MAY 1st, 18

It has been resolved to hold an Exhibition of Ob relating to Pharmacy, or having a special interes members of the drug trade.

The proposal originated with the Nottingham Local mittee of the British Pharmaceutical Conference, and laid before a meeting of the Executive Committee, he 17, Bloomsbury-square, London, it was cordially adopt

The British Pharmaceutical Conference will me Nottingham, on Tuesday, August 21st, 1866, being the of the meeting of the British Asssociation for the Adv ment of Science. Professor Bentley, F.L.S., etc., i President of the Conference this year. Its procee usually extend over portions of three days, consisting i reading and discussion of Papers containing the results investigations of professional subjects.

From experience of the two Annual Meetings that been held, in Bath and Birmingham respectively, in and 1865, it is confidently anticipated that a large nu of chemists will assemble from most parts of the count

The central position of Nottingham furnishes an important reason for holding the Exhibition at the tim place already named.

It is desired that the following classes should be sented, viz.:—

1. Objects representing novelties or improveme pharmaceutical processes, including apparatus and u for evaporation, distillation, pulverization, displace filtration, etc. Applications of gas are especially des Models or drawings will also be eligible.
2. Instruments intended for use in chemical inv tions, such as apparatus for volumetric analysis, s scopes, polarizing apparatus for testing the pur essential oils, etc.
3. Microscopes, microscopic accessories and object
4. Apparatus used with a remedial intention, as g and electro-magnetic machines, enemas, etc.
5. Illustrations of general business fittings, and ar ments for dispensing.
6. Improved dispensing appliances, as bottles, bo pills and powders, labels, etc.
7. Poison bottles, poison labels, etc. Illustrati precautions against mistake, either by dispenser or p
8. Simple or compounded medicines newly intro or proposed for use in medicine.
9. Improved preparations for the administrati medicines of established reputation. This class include methods for disguising nauseous remedies by of capsules, also the various coating of pills, also im suppositories and pessaries, liquors and other subs for alcoholic tinctures. Artificial mineral waters.

10. Specimens of drugs or chemicals remarkable for fine quality, or other reasons. Specimens in botany, chemistry, etc., illustrating the source of drugs.

11. Foreign preparations, whether proprietary or otherwise.

12. Illustrations of adulterations, and the means of detecting them.

13. Improved dietetic preparations.

14. Books, either English or foreign, relating to pharmacy or collateral sciences.

15. Historical relics, having an interest in connection with pharmacy, or its cultivators, as portraits, autographs, etc.

16. Any improvements in matters usually within the scope of the drug trade, or consistent with it, but which are not embraced by previous classes.

It is proposed that the Exhibition shall be open from esday, August 21st, to Saturday, August 25th, inclusive.

In addition to the favourable opportunity for bringing der the notice of chemists any improvements connected th their avocation, we would especially point out that a port upon the Exhibition will be prepared by a Special mmittee, and published in the proceedings of the British armaceutical Conference. In this way extensive publicity, d that of a permanent character, will be attained.

It may be added that negociations are now pending with e Local Committee of the British Association for the lvancement of Science, which will probably result in this hibition being opened upon one or more evenings to the merous and distinguished company who attend the consazione of that body.

The following regulations are to be observed :—

1. Objects for exhibition are to be delivered at Nottingam free of carriage. In cases where the exhibitor has no pecuniary interest in the articles shown, application for an exception to this rule may be made.

2. Objects are to be delivered on or before August 18th, an advice being sent at the same time by post, and an nvoice of their value, stating whether intended for sale or not.

3. Descriptive accounts should accompany all apparatus, etc., requiring such.

4. The Committee will take charge of unpacking and epacking articles sent for exhibition.

5. The Committee reserve the right to decline any bjects that they may consider unsuitable.

ould you be willing to exhibit, be so good as to sign d return the annexed form.

We are,
Yours very respectfully,
J. Attfield, } *General Secretaries,*
R. Reynolds, } *Brit Pharm. Conf.*
J. H. Atherton, *Local Secretary,*
Long-row, Nottingham.

The form referred to may be obtained from the Secretaries. must be filled up and returned to Mr. Atherton before ly 1st.]

PRESCRIPTIONS.*

mediæval times an orthodox prescription written by a iple of the advanced school of polypharmacy must have fully bothered the compounders. When fifty ingredients ned a moderate allowance for a mixture, and baths, uses, and enemata were prescribed on the same magnificent c, it may be fairly assumed that the doctor's idea was t some one or other of the heterogenous materials might good, and that his chief care was to exclude anything ch would certainly do harm. It is perfectly in accordc with the method ordinarily pursued in analyzing the racters of Shakespeare's plays, if we attribute the extreme ecuniosity of the *Apothecary* whom *Romeo* knocked up, his having, at the outset of his career, been called on to pound such a prescription. He, being a conscientious , ruined himself in the attempt, and afforded a warning which his successors have profited.

he simplicity of modern prescriptions is only a reflection of the greater exactness with which diseases are diagnosed and proper remedies adapted. That which was formerly mere matter of guess is now a logical conclusion from precise knowledge; and not only has the method of prescribing undergone very considerable changes, but the very form and fashion has been modified. There is one very marked innovation in the writing of prescriptions which has of late years gradually made its way, and is now adopted by many eminent practitioners. The alteration consists in the substitution of English for Latin terms when directing the manner of taking or using the remedy prescribed. Everyone has heard the old joke as to the mistaken reading of "pro re natâ," when the polite compounder sent a maiden lady a liniment for a new-born child; and the equally venerable story of the aperient dose prescribed with the reservation, "Si alv. deject. occur. tene manûs," which was translated, "When the bowels are relieved hold your hands."

There is undoubtedly a certain advantage, where druggists are thoroughly educated—as is now generally the case,—in the directions for compounding medicines being written in Latin. It is the only language universally understood; and when the time arrives that all the pharmacopœias of Europe are assimilated, its general use will ensure correctness wherever prescriptions are prepared. Moreover, it is not always advisable to let patients exactly know what they are taking. The practical experience of the most eminent chemists gives daily evidence of this; for prescribers, almost without exception, continue to order Hyd. chlorid. and Pil. saponis co., instead of using the terms Calomel and Pil. opii, as adopted and advised in the new Pharmacopœia. But those regulations in a prescription which the patient has to observe might with advantage be always written in English, so that there would be some check in case the label should not correspond with the doctor's directions. It would avoid all those uncouth Latn iordinances which may be found in Dr. Pereira's "Selecta è Præscriptis," and the attention required in warping Latin to unaccustomed purposes might be more usefully bestowed. When the College of Physicians acknowledge that their learned body understand English better than Latin, and permit the Harvenian oration to be delivered in the vulgar tongue, it is surely time that druggists be relieved from the great responsibility incurred in translation of the crabbed Latin directions appended to prescriptions. But if this method of prescribing come into general use, it is important to guard that the directions for the patient be written on a separate line to those for the druggist. One case which recently fell under our observation will illustrate this. A lady was directed to take a certain powder of which six doses were ordered, the prescription running thus:

> "℞ Ferri pyrophosphat. ʒi.
> in chart. vi. divide one to be taken twice a day."

As therefore the patient understood that she was to divide one of the powders, she had to appeal to the prescriber for the settling of her doubts. Trivial as such a matter may seem, it is well to bear in mind that every part of a prescription should be carefully read over before being delivered up; for somehow it does usually occur that, if a chance for misunderstanding be afforded, error is sure to arise. Hence the importance of medical men, and especially physicians, writing their prescriptions in some such good round-hand as the authorities of the Foreign Office compel their clerks to adopt. It is perfectly true that early professional education, the practice of scribbling notes of lectures and extracts from books, tends to spoil an originally fine hand. But a little training and care will soon obviate this defect, and doctor, chemist, and patient will in the end derive advantage. As a general rule, it may be laid down that the most illegible hands are those in which the letters incline most to the right. This method of writing is a comparatively recent and useless innovation. The old upright hand of the seventeenth century, such as we find in old receipt-books and diaries, might well serve for a model of clearness, and the more nearly the caligraphy approaches to this original style the more legible it becomes.

Between 3 and 4 o'clock on Sunday morning, the 6th inst., a fire broke out in the premises of Messrs. Morgan and Co., patent plumbago crucible manufacturers, Church-road, Battersea, destroying two hogsheads of crucibles, and doing damage to another on a wharf before it could be extinguished.

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* Extracted from *The Lancet.*

PROFESSIONAL ETIQUETTE.

The circumstances attending the sudden death of Lady Knight Bruce have been thus commented on by a correspondent of the *Times*:—

Sir,—As an eye-witness of a very sad occurrence—viz., the awfully sudden death of Lady Knight Bruce, I trust you will permit me, through the medium of your widely-read columns, to offer a few remarks with regard to the etiquette—law I hope it is not—which forbids any chemist to leave his shop, even to render assistance in the most urgent cases where a doctor's services cannot be obtained at a moment's notice.

In the case to which I have above alluded, no professional aid could be procured until too late to be available, although four medical men were summoned as early as possible.

Two chemists in Oxford-street refused to do more than send for a doctor, notwithstanding they were informed of the pressing need of instant succour.

Those around the unfortunate lady did all in their power in the hope of restoring her to consciousness, but unprofessional efforts must be uncertain and often misguided.

Under such truly distressing circumstances it does seem strange that chemists are not permitted to attend personally,

I have the honour to be, Sir, yours obediently,

April 30. E. F. P.

HINTS TO DISPENSERS.

A suggestive paper bearing the above title, was read by Mr. Samuel Taylor, at the March meeting of the Leeds Chemists' Association. The following is an abstract of this paper:—

The subject naturally divides itself into two parts, viz., Hints to the Head, including all those qualifications of *mind* and *temperament* which fit a man for becoming a good dispenser; and Hints to the Hands, under which head a few suggestions may be offered touching the general manipulation of a prescription.

Under the first of these divisions, it will be well to observe that a good general education is perhaps the most essential qualification. A dispenser's writing should be clear, distinct, and neat, at least; so that no blame may attach to him for mistakes in reading his directions. His orthography and acquaintance with "Murray" should be unimpeachable, so that patients may not have their faith in his medicines rudely shaken by any fault of his on this score. A good practical knowledge of figures, especially the multiplying and dividing of fractions, will be of great service to himself, and is necessary to the safety of those who have to take strong preparations coming from his hands. Under existing circumstances, *i.e.* whilst the Pharmacopœias are wholly or partially, and physicians prescriptions almost entirely written in *Latin*, it is important that the dispenser be at least well grounded in that language. The stigma so often laid upon us as a class, that ours is a system of "Dog Latin," is owing to a deficiency in this branch of education amongst us, and is one that comes within the province of associations like this to remove, by establishing classes for the better instruction of the younger portion of the profession in the Latin language.

The next qualification, under this division, necessary to a dispenser, is a good knowledge of chemistry and materia medica; of which two subjects, the more he knows, the pleasanter will be his duties, and the higher the position he is likely to attain amongst his professional brethren in the world.

Posology is another branch of information in which the dispenser should be well up, as medical men are not infallible, but, like the rest of humanity, sometimes liable to err. He should therefore be able at a glance to detect an overdose, and thus act as a check betwixt the doctor and the patient. These are qualifications of mind which can only be acquired by assiduous attention, but which must nevertheless be attained ere the dispenser can practise his calling either with comfort to himself or safety to his clients. There are, however, certain other mental qualifications, which, though not absolutely essential to the compounding a prescription, are yet highly important, and deserving attention. The most important of these perhaps is caution, from the want of which so many sad accidents have occurred, spreading dismay throughout the profession and the country. This caution or care need not interfere with dispatch in dispensing; for many dispensers, by the power of concentrating their thoughts upon the one
object then in hand, have been remarkable for their quick
as well as correctness in dispensing. A few aids to cor
ness may here be mentioned:—that of copying prescrip
prior to making up the medicines or writing the la
whereby the general meaning and composition of the pres
tion is impressed on the mind; that, (where practicabl
having all medicines prepared by the dispenser, checked
sent out by either the master or another assistant; th
having the measuring of all powerful remedies, as tr. acc
tr. nucis vomic., preparations of hydrarg. oxymur., etc.,
ordered for internal administration, witnessed. The
further, the now generally adopted arrangement of a cher
shop, so that the dispensing of medicines is kept quite
from the retail counter. In shops where the stock-bottl
exclusively stoppered, a tin cap fitting loosely over the st
would probably form a sufficiently distinctive feature t
tinguish poison-bottles from ordinary ones; or if caps b
covers for many of the ordinary bottles, then a different-sh
one might be used for the poisons. Still these are but
and the great security against accident lies in the concent
attention of the dispenser. Quickness of perception,
readiness to understand the general interpretation of a
scription; coolness, or a collectedness of mind under a l
pressure of work, are also qualifications worth the cultiv

Under the second head it may be just remarked at the
set, that a quick eye and delicate nose are both usef
checks and tests. Medicines, as generally prescribed i
country, may be classed under one of the following divisio
liquids, comprising mixtures, lotions, liniments, gargles,
pills and powders; ointments and plasters. The first
will demand the largest share of attention. In compou
medicines, avoid using a mortar as much as possible, th
preventing unnecessary trouble and straining, as liquid
rarely come out of a mortar in the same condition as
entered it. Many of the soluble salts, such as bicarbo
potash, bicarbonate of soda, Rochelle salts, etc. (if of th
make) are perfectly and readily soluble in ordinary aq
vehicles, yet how common the practice of rubbing them
in mortars, thereby running the risk of contaminating
besides losing time. The heavy carbonate of magnesi
trisnitrate of bismuth may also, as a rule, be slippe
the bottle, without the necessity of dirtying a mortar.
soluble scaly preparations dissolve more readily in the
than by rubbing in a mortar. On the other hand, the
many cases in which the use of the mortar is absc
necessary to the production of an elegant mixture; as
bulky powders are prescribed, which must be gradually r
up with the liquid; also when considerable efferve
takes place in mixing; when hot water is required fo
tion; when crystals are to be broken down and dissolv
rubbed up when insoluble. When extracts are orde
mixtures, the readiest means of dissolving them is by w
them into a smooth liquid paste on a slab with a palette
and then scraping off into a measure containing more
vehicle, and gently mixing with the knife. Oil of al
and olive oil, when ordered with liquor pottassæ, form
nice emulsion, by diluting the alkali freely, and shaki
two together. When compounding a mixture contain
gredients which act chemically upon each other, it is ad
to keep them as far apart, and as much diluted, as pc
Chloroform, creosote, and essential oils, should, if an
tures are present, be dissolved in them prior to being
to the mixture. In rubbing oil of cubebs or other es
oils in large quantities with mucilage, great care is ne
to avoid an insoluble compound forming; this may l
vented by judicious diluting during the process. Gall
should be dissolved in hot water, as also should qui
there be no other solvent present; but care must be t
ascertain that there is not more of either than the n
will afterwards retain when cold. Tincture of benzoi
and other gum-resin tinctures, should be added to m
nearly at the last, and immediately shaken gently.
cyanic acid should be added last of all. Nitrate of
diacetate of lead, and other salts decomposed by o
water, should be dissolved in distilled water.

The following queries may here be put:—What
medical man intend when he expresses the quantity
powerful medicine in a mixture by the term *guttas*?
really mean drops, or is he under the impression t
difference between drops and minims is so trivial as
necessitate his particularizing? When the term "ad Oc

urs, which is intended, a sixteen or twenty ounce mixture ?
it generally understood that unless the prescriber specifies
B. he means P.L. ?

The next class to be noticed, are pills and powders. With
pect to the latter, the best mode of obtaining a uniform
nixture, perhaps, is by weighing and rubbing well together
smaller quantities first, and then add the larger ones
dually ; and in cases where large quantities of bulky
vders are ordered, by sifting. As to their division into
arate doses, probably a practised eye may be more safely
ted than many a pair of dispenser's scales.

ills should be kept as small in size as practicable. In order
his, some of the soft extracts in general use might be kept
d down ready for making up, or in the case of those seldom
ired, by evaporating them on a small pill tile in front of
rdinary fire. Rhubarb should be made up with some thin
id, and as much added at once as will be sufficient to
e up the mass. Quinine pills may be kept down in size
reducing the quinine to a fine powder before attempting
nake up.

ome substances are very difficult to incorporate. The
phates of zinc and iron should first be reduced to fine
vder, and confection of hips (that sheet-anchor of the pill-
ker) be used to bind them into a mass. Creosote and
ntial oils are rather troublesome things to get into pill-
ses when ordered in large quantities; some recommend
ir being absorbed by any powder ordered along with them,
dded expressly for the purpose ; others, that they should
added last ; and others, that they should be made into a
cilage with a few drops of strong solution of gum, prior to
g absorbed by the powders. Oxide of silver should be
pounded with non-saccharine substances to prevent
idation. Many pill-masses, as the compound galbanum,
d readily to a warm pestle and mortar, when all other
tment fails. The objectionable smell and flavour of
rianate of zinc and other offensive medicines, may be
ost entirely covered by a skilful coating of silver leaf or of
am-tolu.

he next class of preparations—ointments—will not require
y comments. They should be made uniform, both in
sistency and colour, and every trace of grittiness avoided
ubbing down insoluble substances with oil, or dissolving
ot water such as are soluble, as in the case of iodide of
assium and tartar emetic. A metal knife should not be
d for ointments containing nitrate of mercury, corrosive
limate, iodine, or even red precipitate, if the ointment be
ted or the knife have to come in contact with the precipi-
prior to its being thoroughly mixed in the ointment.

he last preparations to be touched upon are plasters, as
rds the manipulation of which more may be learned by
month's practice than by twelve months' lecturing.
aps the stiff "paper form" may be suggested, as affording
eat improvement upon the old system of spreading plasters
out one. Also that opium, belladonna, and ammoniacum
ters should have an adhesive margin.

THE MEDICAL COUNCIL.*

N Thursday, May 17th, the Medical Council will meet at
Royal College of Physicians. We could wish that before
time the amended Medical Act promised by Sir G. Grey
e well on its way through the House of Commons. But
annot learn that the timbers are fairly laid, so that it is
cult to state the day of launching the ship. The matter
nderstood to be now in the hands of Mr. Henry Thring,
iamentary Counsel to the Home Office. We know that
business of parliamentary counsel to that office is no light
; but we have been waiting the good pleasure of Mr.
ing for some time now, and as the Bill to be drafted is
ar more important than it is complex, we can but hope
the present delay will be soon brought to an end.

n effort will probably be made to render the application
he regulations requiring a preliminary examination more
ngent; but if no protection be given, increasing strin-
cy will not be peculiarly acceptable. Last Monday Mr.
land, the member for Evesham, brought in a Bill which
shortly be read a second time, providing that no person
is not a member of the Royal Veterinary College of Surgeons shall be permitted, under certain penalties, to call himself a "veterinary surgeon." We have serious doubts whether horses and their ailments can properly be considered entitled to precedence over human beings and their disorders, but no doubt a good many friends of the stable will give the Bill their warm support on the second reading.

The Pharmacopœia is still *in limbo.* Unhappily, Mr. Warrington has been for some months seriously indisposed, but whether the Pharmacopœia ought to have been kept waiting so long, and purchasers of the Pharmacopœia indulged with so many copies of a book which is only published to be superseded, is a question on which the profession will probably differ in opinion from the committee. At any rate the profession suffer by the delay, for such of them as want a Pharmacopœia are put off with a book whic will soon be comparatively useless.

Correspondence

LETTER FROM THE PRESIDENT OF THE PHARMACEUTICAL SOCIETY.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Sir,—On page 52 of the last number of your paper, in the transactions of the United Society of Chemists and Druggists, you publish a letter which was addressed by me to Mr. Matthews, and on page 53 a resolution of the Executive Committee of the Society appears, professing to state the question to which my letter was a reply.

It runs thus—"Whether the Pharmaceutical Society would be willing to co-operate with the United Society in urging Government to pass a Bill *for the incorporation of the trade*, based upon the recommendations of the Parliamentary Select Committee."

The question actually put to me, as I find by a reference to Mr. Matthews' letter, and you may see in your March number, was, whether in my opinion the Council "would be willing to co-operate with the Executive Committee of the United Society in urging and assisting the Government to introduce a Chemists' and Druggists' Bill into Parliament, based upon the recommendations of the Select Committee, and submitted to Government at the close of the last session ?"

Now I think I have some reason to complain of the introduction of the words, "*for the incorporation of the trade,*" to the question, after my answer had been considered ; inasmuch as the expression in the last paragraph but one of my letter, "*that I regard the union of all men of one calling as an important means for elevating the standing of the whole body,*" was neither caused by anything which occurred in the question put to me, nor by the recommendations of the Select Committee of the House of Commons, which contains no mention whatever of such an incorporation, but simply from an opinion I have always held, and continue to hold, in common, I believe, with all members of the Society over which I have the honour to preside.

I have the honour to be, Sir,
Your obedient Servant,
George W. Sandford.

47, Picadilly, May 10th, 1866.

TRADE LEGISLATION.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Sir,—Nothing can be more gratifying to those members of the United Society, who have for some time past been advocating a conciliatory policy towards the Pharmaceutical Society, than the tone displayed in the leading article of their *Journal* for this month.

The letter from the President of the Pharmaceutical Society is an evidence of more friendly feelings springing up between the two sections of the trade. The spirit displayed in it leads us to hope that old animosities are quenched, and a proper understanding come to. The Executive Committee of the United Society, thus encouraged by the success of their first step, have advanced, and offered to act in concert with the elder institution, to gain the object which should be the desire of all. And if the Pharmaceutical Council will accept this proposition, a bill may be framed which will destroy rivalry, and incorporate the whole trade upon a satisfactory basis.

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* From *The Lancet*, May 5.

There may be some who will be ready to cry out against this harmonious act, but I am quite sure the Executive Committee will, in its endeavour to accomplish the wishes of the trade, see full justice done to those they represent. I am equally satisfied that the Council of the Pharmaceutical Society have the object of Jacob Bell sufficiently before them to desire to embrace the offer of unity to carry out his views.

To elevate the educational standard has long been the aim of Jacob Bell's successors; to unite the trade, and conserve its business interests, the work of the United Executive. A mistake for some time existed in supposing that these missions were antagonistic, but both bodies have become wiser, and it is now believed, that which neither could do alone, may be accomplished with ease by co-operation.

It is simply a question of judgment as to the fitting time to act. The President of the Pharmaceutical Society may be right in his notions as to its being "unwise, impolitic, and useless" to urge Government, under present circumstances, but there is no reason why, during the present busy period, the two Societies should not be using the time for coming to an agreement, and by adopting the recommendation of the Select Committee as the basis of a Bill, with an Act prepared, giving the right of nomination and election to all, the support of the entire trade would be gained, and the Government would be relieved of an important and perplexing task.

It is intended that the annual meeting of the United Society should shortly take place, and it is to be hoped that on that occasion the Executive Committee will receive the support of the members in their desire to work in concert with the Pharmaceutical Society.

I am, Sir, yours obediently,

May 10, 1866. J. Wade.

EARLY CLOSING.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Sir,—I was much pleased with Mr. Lowe's letter, condemning late hours of business, which appeared in your March number. No adequate reason can be adduced for chemists keeping their shops open after those of their neighbours are closed. The "owls" who habitually purchase their senna, antibilious pills, or castor oil late at night, are forced to obtain their sugar or calico at a reasonable hour. The assertion that the early closing of chemists' shops would put the public to great inconvenience is mere twaddle. To effect the desirable change advocated by Mr. Lowe, chemists must assume a more independent attitude, and show their customers that they are not devoid of self-respect. If chemists *will* lie upon their faces, they must not blame people for kicking them or treading on their necks. At present, when a person discovers late at night that he requires some trifle which is kept by the grocer as well as the chemist, he says to himself, "The grocer's shop will be shut, but I can get what I want from the chemist, whom I shall find, with his collar on, chained to his counter, and eager to receive my pence."

The needed reform may be accomplished by individual efforts. Let each chemist who desires to shorten his working day exhibit in his window a notice to this effect:—

"To reduce the hours of business to more reasonable limits, on and after the   of   , this establishment will be opened at   o'clock in the morning, and closed at   o'clock in the evening. For attendance after the shop is closed, an extra charge of   will be made."

If such a notice were conspicuously displayed, and the course prescribed in it strictly adhered to, the public would not be taken by surprise, and would, without difficulty, conform to the rules of the establishment. As long as we think so much of the wretched halfpence that may get into the tills of our neighbours, we shall continue to talk about the hardship of long hours, but shall do nothing to shorten them.

With regard to the ringing of the bell after the shop is closed, allow me to give my brethren a hint or two. I ne
answer my bell after the gas is turned down, unless it is r
twice; and I can give good reasons for this practice. '
bell is sometimes rung for nothing, and the chemist may le
his bed or easy chair to find that he has been merely
victim of an unfeeling prank. Again, the proverbially l
disorderly person frequently thinks of some want, rea
imaginary, and seeing the bell of the miserable drudge,
chemist, pulls it at once, without the least compunct
On getting no answer, he will, perhaps, consider whethe
is justified in disturbing his fellow-creature so late at ni
and if he takes a proper view of his conduct, he will s
away with a feeling akin to shame. But the person
really wants something, and may fairly expect to be accom
dated, will be sure to ring *twice*. Upon such a person I
sider it my duty, as a Christian, to attend willingly.

Your correspondent who talks about a "strike" is re
begging the question. Chemists, as a body, must have
enlarged views, more self-respect, and more faith in
another. Let the chemists in each town meet togethe
the hours of opening and closing, and give the public
notice of the course they intend to pursue.

Yours faithfully,

Arthur Remingto

Jersey, April 27, 1866.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Dear Sir,—I am very glad to find your correspondent
strongly advocating early closing. I am sure there is no
needing the boon of a few hours' daily rest so much a
chemist and druggist; and it is just as much within
reach as it was within the reach of those traders who
enjoyed it for years past. At the present time there
subject so deservedly worth consideration as the short
of a chemist's hours of business, and it is a hopeful sign
the *Pharmaceutical Journal* of this month also publishes
excellent letters on the subject. Principals require
mental and more bodily rest, assistants need more ti
study the essentials of their craft, and apprentices need
of leisure in order that work and study may be so bl
with relaxation as to make them regard the business
chemist a genteel and pleasurable calling. At pres
connection with the business usually implies a stern ap
tion to physic, books, and counter, from morning till
from week to week, and, perhaps (with the exception of
transient days), from year to year. Hence the difficulty e
enced in getting suitable apprentices. I was lately inf
that to a youth's advertisement for a situation as an ap
tice there were upwards of forty applications. I thin
will show the unwillingness of the rising generati
embrace so stringent a calling. As many other profe
and trades are enjoying the benefits of early closing, y
chemists cannot be expected to remain patient "slaves
lamp;" for why should not they be allowed the same
tion from toil as those, who in many cases, are only
employed? In the several letters that have appeared o
subject, many valuable suggestions have been made.
of the proposals, however, appear to me to be impracti
such, for instance, as the adoption of a scale of charg
overtime and night-work.

The course of action most likely to lead to good
would be to close at the most convenient time for the lo
to turn off the gas when the shutters are up, and to ke
door fastened, as on a Sunday. This course, when ge
known, I anticipate would answer every purpose. (I f
your first Volume, in pp. 153 and 181, two articles o
subject which deserve to be re-read by your subscribers
leaving a door-shutter down, and having a light in th
outside, or the shop inside, we attract the attention
passer-by, or the gazer from some opposite window.
signs of business often induce people to come in and
articles that would do just as well on the morrow. W
am writing this, at 9 40 P.M., I have just answer
"bell;" I found a something required for a person w
been poorly only for a *fortnight*, and who now, at thi
thinks he had better take something for it.

United action in each town only is requisite; but to
one uniform time of opening and closing would be abs
circumstances must be suited to localities. What I s

his,—that we should all close as early as we think appro-
ate, and, when thus closed, fasten our doors, and turn off
gas to one minute jet, so as not to encourage late
tomers; but, of course, be ready, as is our duty, with
asure, if necessity demand it, to supply anything that can
eviate the many sufferings which humanity is heir to: the
tation of the house or night-bell should at all times ensure
answer to effect this purpose. Apologising for intruding
much on your valuable space,

I am, dear Sir,
Yours very truly,
A. W. Smith.

3, and 94, High-street, Rye, Sussex.
April 24, 1866.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

ir,—Great improvements have taken place during the last
rter of a century in most parts of the country as to the
rs of chemists. Thirty years ago, I can remember opening
p at half-past six in winter, and six in summer, and
ing "all the year round" at ten, except on Saturdays.
Sundays we kept open all day, and sold everything.
ught many a hard battle in different towns to get the
rs lessened, and generally with some measure of success.
here has been a marked alteration since then as regards
ping shops open on the Sunday. In most towns Sunday
k is the exception rather than the rule. In all avocations
fe there will be penurious individuals who will forego the
ury of a day of rest, and work through the 365 days
out intermission. Happily these are the minority, or the
se of progress would be hopeless.

very candid person will admit that, in most large towns,
eat deal still remains to be done towards shortening the
rs of labour. This can only be done by the effect of
al suasion. I should be sorry to see anything so degrading
he assistants, and so lowering to the masters, attempted to
arried out as the course proposed by one of your corre-
dents. It would only aggravate the evil instead of doing
good. The idea of a strike amongst educated men is
us.

the assistants should be so infatuated, the result would
hat many of them would be thrown out of employment.
his town, out of more than thirty chemists, not ten keep
tants, only apprentices. The consequence would be
, if this plan were carried out, those who are unlucky
gh to have assistants would, in October next, be obliged
lose an hour or so before some of their neighbours, or
the shop open themselves. In the latter case, it is
ty clear that they would try to put their shoulders to the
el, and manage to dispense with the services of their
torial assistants altogether.

e plan proposed is preposterous. No stated time of
ng could be settled for the whole of the trade; every
has its own facilities or difficulties in this respect.

ill, as I said before, much may and ought to be done.
the matter be forced upon the attention of the masters in
town, and let them arrange as early an hour as their
icular locality will allow. As ours is a peculiar business,
ering us liable to be called upon early and late, let the
be met in every establishment by mutual consideration.
ve found in my own experience that, in some situations
re the hours were unavoidably late, a little thought and
agement on the part of the principals has secured time
for study and recreation for all in turn. I feel certain
here is where the first movement requires to be made.
every employer have a little thought for his own establish-
t, and not make the fact of his having been a slave in
life be an excuse for keeping up the same abominable
ng.

is system of consideration for each I have endeavoured
arry out ever since I was a master; and although ours is
te business (I hope not always to continue so), still, by
means satisfaction is given to all.

ne word about being called up at night. For twenty
s I lived in some first-class establishments, and I believe
y say that three times in twelve months would cover the
s anywhere disturbed by night customers. I think much
not be made of this as a cause for complaint as a rule.

Yours respectfully,
Veritas.

rk, May 9, 1866.

THE EXECUTIVE COMMITTEE OF THE UNITED SOCIETY.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Sir,—Perhaps some of your correspondents can enlighten the readers of the Chemist and Druggist as to the mode in which the Executive Committee of the United Society conduct their business. I presume it is necessary that not only the Executive Committee, but every member of the United Society, should be a chemist and druggist.

I am not aware that provision has been made in the constitution of the Society for the admission of any other class of persons but chemists and druggists. In your report of the proceedings at the last Committee meeting I notice that the seconder of two resolutions is a gentleman who (as far as I have been able to learn) is in no way connected with the trade. By what right he came to be elected on the Executive Committee, and by what authority he has been empowered to second the resolutions, are enquiries which, I think, ought to be satisfactorily answered to the members of the United Society.

It requires no abstruse argument to show that the proceedings of the Committee as reported in your columns are illegal, and could be nullified by a general meeting of the members of the Society.

Yours truly,
Manchester, May 8th, 1866. Moneo.

[Mr. C. F. Buott, the gentleman referred to by our correspondent, was elected an honorary member of the Executive Committee when he resigned the office of Secretary. He was re-elected with the other members of the Committee by a resolution passed at the last General Meeting of the Society. He is, therefore, empowered to propose or second any resolution.—Ed. C. and D.]

SALE OF POISON BY UNQUALIFIED PERSONS.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Sir,—The following paragraph is extracted from the *Hants Telegraph* of the 21st of April:—

> Attempt at Suicide by Poisoning.—On Wednesday evening a domestic servant in the employ of Mr. Wilder, of 2, Claremont-terrace, Buckland, made a determined attempt to destroy herself by poison. She had, it appears, obtained half-an-ounce of white precipitate powder from Mrs. Cook, a greengrocer, of Somers-road, Southsea, and had taken the whole of it; but the usual symptoms of poisoning being detected by some member of the family, medical aid was obtained, and Dr. Evans, and Mr. Kirton, chemist, were quickly in attendance. By means of a stomach pump the poison was removed from the system, and by the following morning the young woman had perfectly recovered from the effects of it. No reason has been assigned for the act, and when spoken to upon the subject she complained of the interference which had saved her life as being "cruel."

Who is to be blamed? The learned greengrocer, the legislator, or the overreaching druggist, who touts for orders to the keepers of apple stalls, for the sake of the tempting bait of per centage on sale? The sale of such potent poisons ought to be prohibited, save and except under certain restrictions. Certainly a powerful mineral poison like white precipitate ought not to be entrusted to and retailed by a thoroughly illiterate woman, who adds to her store of apples a mixture of sweetmeats, matches, stay-laces, buttons, hooks and eyes, pins, needles, firewood, rouge, hair-oil, tape, and other sundries.

Yours faithfully,
A Subscriber.

French as it is Spoken.—The *Lancet*, in describing the recent conversazione of the London Obstetrical Society gives the following good story:—"The presence of foreigners lent an additional interest to the meeting, and we think these gentlemen must have been gratified at their very cordial reception. We could not help remarking that (as usually happens on such occasions) every foreigner, no matter from what country, was supposed to be assailable in French; and the efforts to converse in this tongue were sometimes a little amusing. For instance, this little fragment of conversation caught our ears, whilst blocked up in rather a dense crowd. An Englishman was speaking of some instrument to a distinguished foreigner, 'Il était fait,' said he, 'pour une *special case.*' 'Plait-il?' inquired the gentleman, who did not quite understand. 'Oui, *plated*,' was the unhesitating reply."

NOTES AND QUERIES

A CURIOUS PRESCRIPTION.

The following prescription for a mixture was lately sent to a chemist in London:—

℞ Spirit Æther Nitr.	℥iss.
Æth. Chlor.	ʒiij.
Magnes. Sulph.	℥iij.
Aq. Font. ad	℥vi.

We know that this prescription was dispensed, but we do not know how the solid glacial mass was extracted from the bottle.

A. R. (Jersey).—We have been compelled to abridge your excellent letter, but have endeavoured to preserve its spirit.

"*Reform.*"—Your communication is too diffuse.

H. F.—We have been pained by the discovery that some of your sentences were conveyed from letters in the *Pharmaceutical Journal* (see Vol. XVI., p. 321, and Vol. II., new series, p. 299). Our correspondence columns are intended for original communications.

J. H. H. H.—We do not feel justified in noticing the advertisement.

S. E. B.—You should procure Royle and Headland's *Manual of Materia Medica and Therapeutics*, published by Churchill, price 12s. 6d.

A PRACTICAL JOKE.—There is a story going in North Staffordshire (says the *Macclesfield Courier*) that a farmer in the direction of Leek, who had lost some cows, was fully persuaded that he himself had been attacked by the epidemic. Forthwith he consulted his own medical man, who tried to laugh him out of the notion, but to no purpose. The farmer then went on to an old well-known practitioner, who, being a bit of a wag and seeing how matters were, entered minutely into the details of the case, expressed his concurrence with the patient's views, and told him he could cure him. He then wrote a prescription, sealed it up, and told the farmer to go to a certain druggist in the next pottery town. The farmer lost no time in going with the prescription, but was somewhat startled when the druggist showed him the formula, which ran thus:—"This man has got the cattle plague, take him into the back yard, and shoot him, according to Act of Parliament."

THE PREVAILING EPIDEMIC.—Influenza is very prevalent in London at present, and is one of many other signs that forbode a probable invasion of cholera. The symptoms we have noticed are shivering and malaise, followed by dry heat of skin (but in one or two cases in which the thermometer was used it did not indicate any abnormal rise of temperature), great sneezing and defluxion, tickling cough, and muscular pains. Children seem to be greater sufferers than adults. The old-fashioned stimulating diaphoretic, composed of Liq. am. acet. and nitrous ether, with conium for the cough and plenty of nourishment, seem to have been successful remedies, and the epidemic has been extensive rather than severe.—*Medical Times.*

PRACTICAL HOMŒOPATHY.—M. Reymond, in a recent lecture on Heine, the German wit and satirist, tells a good anecdote. Heine and his wife, travelling in the south of France, met Ernst, the violinist, who begged of him to take charge of one of the celebrated Lyons sausages for one of his friends, a homœopathic Physician. In those days railways were not, and the road was tedious. Madame Heine became very hungry, and could not resist a little piece of the sausage, which she found excellent. Presently, Heine joined her, and was quite of her opinion; and, in fact, the sausage was a great treat, and on their arrival at Paris had so diminished in size that Heine dared not forward the mere stump that was left to its destination. But he thought better of it, and cutting with a razor a slice as thin as paper he placed it in an envelope, together with the following note:—"Dear Doctor,—As a result of your investigations the fact has been acquired by science that millionths of parts produce the greatest effects. Accept, then, the accompanying millionth part of a Lyons sausage which Ernst charged me to remit to you. If homœopathy is indeed a truth, this little portion will produce on you the same effect as the entire sausage.—Yours, HENRI HEINE."—*Medical Times.*

THE BANEFUL EFFECTS OF NICOTINE PREVENTED. Melsens has found that tobaccos, from various coun contain nicotine in very different proportions. In to from some parts of France (*e.g.*, the department of the there is 7·96 per cent. of nicotine; whilst Havannah to contains only 2 per cent. He proposes to smokers a w preserving them from the effects of the alkaloid, and a them to put into the tube of the pipe or cigar-holder a ball of cotton, impregnated with citric and tannic acids the smoke passes through the cotton, it will depos nicotine therein, in the shape of tannate and citrate Melsens has made very ingenious experiments, which very great way to prove that he is perfectly correct.

BOTTLED CALORIC.—"Never despair," says Pr Jeannet, of Bordeaux; "your coal-fields may fail acetate of soda will at any rate prevent your noble rac perishing during that gloomy British winter." This stance affords, in fact, says the Professor, a mea "storing up the solar heat." Its peculiarity is that, it crystallizes when exposed, in solution, to a very degree of cold, it will cool without crystallizing if pla a closed vessel. Cooling thus, it retains the greater the caloric which it had absorbed while being melted this caloric is given off the moment the bottle is uncor the jar uncovered. M. Jeannet has proved it. "On gramme of acetate, melted and then cooled down in a vessel to the freezing-point of water, disengages, crystallization is induced by uncorking, heat enough 300 grammes of ice, or to raise 300 grammes of wate the freezing-point to 79° centigr." Swift was not wild after all, then. Sunbeams from cucumbers would s be stranger than solar heat from bottles duly place glass frame that the sun's rays may be concentrate them." Well may the *Union Médicale* call the path M. Jeannet has struck out "a seemingly fantastic Still it clearly hopes for great results from the discove seems to look forward to the time when there will be trade between England and the south of France in " caloric," and when the Englishman, graduating his taliity (as M. Kervigan tells us he does already in the of drinks) according to the quality of his guest, will, inferior, simply uncork a few bottles of the watery s of his native island—treat an equal to the strong but caloric of Bengal—but if he has a lord at his table, w down to his "heat-cellar" for some of the "meilleur the côte rotie"—warm but full of bouquet. *Nous* Anyhow, it is kind of M. Jeannet to try to console u such a visitation as that which Mr. Jevons predicts *Mall Gazette.*

TRADE REPORT.

THE uncertainty of political affairs on the Continent, panic here on the Stock Exchange, together with the advance in the bank rate of discount to 9 per ce caused almost a suspension of business in Chemicals, few sales made have been from hand to mouth at eas Tartaric Acid is now at 1s. 5d.; Oxalic at 12½d. Acid at 2s.; Sal Acetos 14½d.; Bichromate 5⅝d. to 6 Prussiate of Potass 13d. to 13½d. Some parcels of Quinine have been sold at 4s. 8d. to 4s. 9d. and English is almost nominal at 5s. 3d. Iodine is low made at 7¾d. to 7⅞d. Soda Crystals are lower, b made at 125s. ex ship. Ash is also cheaper, 2⅛d. to degree. Alum is steady, at £7 10 for tierces and £7 barrels. Cream Tartar is lower, a few sales made at A large business has been done in Bleaching Pow the price on the spot has advanced to 16s. In Brimstone a steady business is doing, at 13s. 6d., a at 10s. 6d. Sulphate of Copper is dull, and the p declined to 27s. A firm business doing in Sul Ammonia, at 11s. 6d. to 12s., and Sal Ammoniac, at to 37s. 6d., according to quality. Turpentine is low made in finest at 48s. to 49s. on the spot, and 46s. to arrival. A good business done in refined Saltpetre, and prices have advanced to £27 to £28 net cash f. o. b. eed Oil is much lower owing to speculative sales being sed; spot is now 36s. 6d. to 37s., and Hull to June 35s. 5s. 6d. Rape is lower and dull. A good business has done in Petroleum, and the price is firm at 2s. 2½d. for ed. Nothing done in Crude.

the Drug Market business is checked by the cause as e noticed, nearly all articles which have been pressed suffered a further decline. Castor Oil, however, has in good demand, and prices at the late sales show an nce of ¼d. to ½d. per lb. on last month's rates; good first 6½d. to 7d., and Italian 7½d. to 7¾d. Small sales made il Anniseed at 9s. 6d. Oil Cassia is lower, last sales e at 7s. 6d. Citronelle is lower, the last prices paid were to 4¼d. Cod Liver Oil remains dull, some sales have made at 3s. 6d. to 5s. 6d. per gallon. A good business been done in Camphor, said for export to America, and s have advanced to £6 5s. for China, and to £6 7s. 6d. Japan. East India and Turkey Gum Arabics are firm. lac is again 5s. to 7s. 6d. lower. Some few parcels fine ey Opium have been sold at 14s. 6d. to 15s., being steady s. Star Anniseeds are fully 20s. lower. Cubebs are r cheaper. Cape Aloes are a shade easier; other kinds ly. A large parcel of Tinnevelly Senna sold at 2½d. to and Bombay 3½d. to 4½d. Bees' Wax is without ge. Ipecacuanha is rather dearer, last sales made at 6d. Jalap is without change. In Bark there is no ge. Turmeric is rather cheaper. Gambia is steady, pale s selling at 28s. to 28s. 6d., and Block 21s. 6d. to 22s. mbo Root is lower. Rhubarb is quieter and rather per. In other goods no change worth reporting.

PRICE CURRENT.

ese quotations are the latest for ACTUAL SALES *in Mincing . It will be necessary for our retail subscribers to bear in that they cannot, as a rule, purchase at the prices quoted, uch as these are the* CASH PRICES IN BULK. *They will, how- be able to form a tolerably correct idea of what they ought to pay.*

	1866.		1866.		1865.		1865.	
	s.	d.	s.	d.	s.	d.	s.	d.
L, Cape, per cwt.	70	0	90	0	80	0	100	0
ch	58	0	83	0	60	0	85	0
rto, red	40	0	43	0	45	0	47	0
ly	72	6	75	0	72	6	75	0
les, white	68	0	75	0	68	0	76	0
ence, white	90	0	95	0	85	0	90	0
red	80	0	85	0	80	0	85	0
ogna, white	90	0	95	0	90	0	95	0
WROOT..(duty 4½ per cwt.)								
muda..per lb.	1	2	1	5	1	4	1	7
Vincent	0	2½	0	6	0	2¾	0	6¼
ica	0	3	0	5	0	3½	0	6
r West India	0	2¼	0	3½	0	2	0	3
il	0	2¼	0	3	0	2½	0	3
India	0	2¼	0	3½	0	2¼	0	3½
l	0	3½	0	8	0	4	0	8½
ra Leone	0	3¼	0	4	0	3½	0	4½
S....per cwt.								
, Canada, 1st sort	35	6	0	0	31	0	0	0
l, ditto, 1st sort	37	6	38	0	31	6	0	0
ISTONE,								
h....per ton	150	0	160	0	152	6	155	0
	210	0	0	0	195	0	210	0
r	250	0	260	0	245	0	250	0
ICALS,								
l—Acetic, per lb.	0	4	0	0	0	4	0	0
Citric	2	0	2	0½	1	10	0	0
Nitric	0	5	0	5½	0	5	0	5½
Oxalic	1	0½	0	0	0	9½	0	10
Sulphuric	0	0¾	0	1	0	0¾	0	0
Tartaric crystal	1	5¼	0	0	1	6	1	6¼
powdered	1	6½	0	0	1	7	1	7½
n ....per ton	150	0	155	0	130	0	135	0
powder	170	0	175	0	145	0	150	0
onia, Carbonate, per lb.	0	5	0	0	0	5	0	5¼
Sulphate ....per ton	230	0	250	0	260	0	280	0
mony, ore	180	0	190	0	160	0	180	0
crude ....per cwt	24	0	25	0	24	0	25	0
regulus	35	0	0	0	34	0	35	0
French star	34	6	35	0	35	0	0	0
nic, lump	15	0	0	0	15	0	15	6
powder	6	6	7	0	6	3	6	6
ching powder	15	6	16	0	10	9	11	0
x, East India refined..	0	0	0	0	0	0	0	0
British	65	0	0	0	54	0	55	0
mel ....per lb.	2	5	0	0	2	8	0	0
phor, refined	1	6½	1	7	1	8	0	0
peras, green ....per ton	56	0	58	0	52	6	55	0
osive Sublimate, per lb.	1	11	0	0	2	3	0	0
n Emerald	0	0	0	0	0	0	0	0
Brunswick.... per cwt.	0	0	0	0	0	0	0	0

	1866.		1866.		1865.		1865.	
CHEMICALS.	s.	d.	s.	d.	s.	d.	s.	d.
Iodine, dry .... per oz.	0	7½	0	7¾	0	0½	0	6¾
Magnesia, Carbon per cwt...	42	6	45	0	42	6	45	0
Calcined . per lb.	1	6	1	8	1	6	1	8
Minium, red ...... per cwt.	22	0	22	6	21	6	24	6
orange	32	6	0	0	32	6	33	0
Potash, Bichromate per lb.	0	5½	0	6	0	6	0	6½
Chlorate	1	2	0	0	0	0	1	2
Hydriodate..per oz.	0	7	0	7½	0	6	0	6½
Prusslate....per lb.	1	1¼	1	1½	0	11¼	0	11½
red	1	9½	1	10	1	9	1	9½
Precipitate, red .... per lb.	0	0	2	0	2	9	0	0
white	0	0	2	5	2	9	0	0
Prussian Blue	1	0	1	10	1	0	1	10
Rose Pink ....per cwt.	29	0	0	0	29	0	0	0
Sal-Acetos ....per lb.	1	2½	0	0	0	11½	0	11¾
Sal-Ammoniac ....per cwt.								
British	35	6	37	6	35	6	37	6
Salts, Epsom	8	3	8	6	9	0	0	0
Glauber	4	6	6	0	5	0	5	6
Soda, Ash..........per deg.	0	2⅜	0	3	0	2¼	0	2½
Bicarbonate..per cwt.	19	0	0	0	11	0	11	3
Crystals ......per ton	127	6	0	0	97	6	100	0
Sugar Lead, white per cwt.	38	0	40	0	37	0	37	6
brown	27	0	0	0	26	0	26	6
Sulphate Quinine....per oz.								
British, in bottle ..	5	3	0	0	6	0	0	0
Foreign	4	8	4	10	5	9	0	0
Sulphate Zinc......per cwt.	0	0	0	0	14	6	15	0
Verdigris............per lb.	0	11	1	0	0	11	1	0
Vermilion, English	2	9	3	0	2	11	3	3
China	0	0	3	9	2	6	0	0
Vitriol, blue or Rom. per ct.	27	0	0	0	27	0	27	6
COCHINEAL, per lb.								
Honduras, black	3	3	5	0	3	2	4	5
silver	2	0	3	9	2	8	3	5
Mexican, black	3	2	3	4	3	2	3	5
silver	3	0	3	2	2	10	3	0
Lima	0	0	0	0	0	0	0	0
Teneriffe, black	3	4	4	10	3	0	3	9
silver	3	3	3	6	2	11	3	1
DRUGS,								
Aloes, Hepatic ....per cwt.	100	0	170	0	100	0	200	0
Socotrine	140	0	290	0	160	0	290	0
Cape, good	38	0	40	0	42	0	44	0
inferior	24	0	37	0	25	0	40	0
Barbadoes	50	0	280	0	60	0	300	0
Ambergris, grey ....per oz.	24	0	30	0	22	0	24	0
Angelica Root ....per cwt.	20	0	35	0	20	0	35	0
Aniseed, China star	100	0	105	0	130	0	135	0
German, &c.	26	0	40	0	24	0	40	0
Balsam, Canada ....per lb.	1	4	1	5	0	10	0	0
Capivi	2	3	2	4	1	6	1	7
Peru	4	10	5	0	4	8	4	9
Tolu	2	9	2	10	3	4	0	0
Bark, Cascarilla....per cwt.	20	6	29	0	25	0	36	0
Peru, crown & grey per lb.	1	2	2	2	0	8	2	0
Calisaya, flat	2	6	2	9	2	10	3	4
quill	1	10	2	8	2	8	3	2
Carthagena	1	0	1	4	0	10	1	9
Pitayo	0	9	2	0	1	0	2	3
Red	2	6	13	0	3	0	11	0
Bay Berries........per cwt.	0	0	0	0	0	0	0	0
Bucca Leaves........per lb.	0	7	0	11	0	4	0	10
Camomile Flowers	30	0	105	0	20	0	65	0
Camphor, China	125	0	0	0	125	0	127	6
Canella alba	0	0	0	0	23	0	33	0
Cantharides ....per lb.	2	4	0	0	2	2	2	3
Cardamoms, Malabar, good	5	3	6	6	6	3	7	0
inferior	3	6	5	6	4	3	5	9
Madras	2	9	5	8	3	0	5	9
Ceylon	3	0	3	9	4	0	5	3
Cassia Fistula......per cwt.	15	0	41	0	16	0	28	0
Castor Oil, 1st pale ..per lb.	0	6½	0	7½	0	6½	0	7
2nd	0	6	0	6¼	0	5½	0	6¼
inferior and dark	0	5¼	0	5¾	0	4½	0	5
Bombay, in casks	0	5¼	0	5½	0	4½	0	4¾
Castorum	1	0	20	0	1	0	20	0
China Root ....per cwt.	30	0	35	0	20	0	22	6
Cocculus Indicus	30	0	40	0	26	0	28	0
Cod Liver Oil ......per gal.	3	6	6	0	6	0	12	0
Colocynth, apple ....per lb.	0	7½	1	2	0	8	1	1
Colombo Root ....per cwt.	160	0	220	0	150	0	225	0
Cream Tartar								
French	95	0	97	6	102	6	105	0
Venetian	100	0	0	0	105	0	107	6
grey	87	6	92	6	92	6	95	0
brown	90	0	92	6	85	0	92	6
Croton Seed	500	0	520	0	90	0	95	0
Cubebs	77	6	85	0	82	6	85	0
Cummin Seed	16	0	22	0	20	0	25	0
Dragon's blood reed	200	0	340	0	200	0	300	0
lump	95	0	280	0	70	0	260	0
Galangal Root	11	6	12	6	16	0	17	0
Gentian Root	16	0	18	0	21	0	22	0
Guinea Grains .... per cwt.	90	0	91	0	85	0	90	0
Honey, Narbonne	50	0	70	0	40	0	80	0
Cuba	26	0	35	0	25	0	33	0
Jamaica	32	0	61	0	26	0	60	0
Ipecacuanha ....per lb.	12	0	12	6	10	6	0	0
Isinglass, Brazil	2	2	5	4	1	8	4	6
East India	1	6	4	4	1	0	4	0
West India	3	9	4	2	3	0	3	3
Russian	7	0	10	0	8	0	10	0
Jalap	1	0	5	3	1	0	5	3

	1866.		1866.		1865.		1865.	
DRUGS—*continued.*	s.	d.	s.	d.	s.	d.	s.	d
Juniper Berries ....per cwt.	8	6	10	0	7	0	9	0
German and French ..	0	6	10	0	9	0	10	0
Italian								
Lemon Juice ......per deg.	0	0¾	0	0¾	0	0¾	0	0¾
Liquorice ....per cwt.								
Spanish	75	0	80	0	75	0	80	0
Italian	55	0	75	0	55	0	70	0
Manna, flaky	2	6	3	6	2	0	2	6
small	1	2	1	8	1	2	1	4
Musk ....per oz.	18	0	31	0	24	0	32	0
Nux Vomica	20	0	22	0	12	0	14	6
Opium, Turkey	13	6	15	0	14	0	14	6
Egyptian	5	0	7	0	0	0	0	0
Orris Root ......per cwt.	24	0	36	0	29	0	31	0
Pink Root .... per lb.	0	6	0	0	3	0	0	6
Quassia (bitter wood) per ton	135	0	140	0	45	0	0	0
Rhatany Root ......per lb.	0	5½	1	2	0	5	1	1
Rhubarb, China, round	2	6	11	6	3	6	10	0
flat	2	6	10	0	3	0	7	6
Dutch, trimmed ..	12	0	14	0	10	0	11	0
Russian	15	0	16	0	12	0	14	0
Saffron, Spanish	33	0	40	0	32	0	34	0
Salep.............. per cwt.	110	0	130	0	130	0	0	0
Sarsaparilla, Lima	1	0	1	4	1	0	1	4
Para	0	11	1	1	0	11	1	2
Honduras	0	9	1	7	0	11	1	6
Jamaica	1	1	2	3	1	4	2	3
Sassafras ....per cwt.	10	6	11	0	15	0	16	0
Scammony, virgin ..per lb.	30	0	44	0	30	0	35	0
second	14	0	23	0	12	0	23	0
Sencka Root	3	9	4	0	2	10	3	0
Senna, Calcutta	0	0	0	0	0	0	0	0
Bombay	0	4	0	5½	0	4	0	6
Tinnevelly	0	4½	0	10	0	4	1	0
Alexandria	0	3	0	9	0	3¼	0	8
Snake Root	3	6	0	0	4	0	0	0
Spermaceti, refined	0	0	1	2	0	0	1	1
Squills	0	2	0	4	0	1½	0	3½
Tamarinds, E. India, per cwt.	43	0	56	0	16	6	17	6
West India	16	0	33	0	10	0	22	0
Terra Japonica—								
Gambier ....per cwt.	21	0	28	6	21	0	27	0
Cutch	26	0	30	0	20	0	29	6
Valerian Root, English	20	0	29	0	20	0	30	0
Vanilla, Mexican......per b.	4	0	18	0	20	0	30	0
Wormseed..........per cwt.	0	0	0	0	10	0	0	0
GUM—Ammoniac, drop, per cwt.	120	0	170	0	120	0	170	0
lump	40	0	85	0	40	0	85	0
Animi, fine pale	210	0	270	0	210	0	220	0
bold amber..........	190	0	220	0	190	0	210	0
medium	160	0	180	0	160	0	180	0
small and dark	100	0	150	0	100	0	155	0
ordinary dark	40	0	97	0	40	0	95	0
Arabic, E. I., fine pale picked	80	0	97	0	82	0	90	0
unsorted, good to fine	62	0	78	0	64	0	76	0
red and mixed	50	0	65	0	46	0	60	0
siftings	25	0	40	0	25	0	40	0
urkey, picked, good to fine	170	0	215	0	130	0	168	0
second and inferior.	95	0	160	0	65	0	120	0
in sorts	46	0	70	0	32	0	50	0
Gedda......................	52	0	55	0	39	0	40	0
Barbary, white	95	0	100	0	70	0	75	0
brown	80	0	90	0	45	0	48	0
Australian..................	50	0	56	0	32	0	41	0
Assafœtida, fair to good	40	0	85	0	28	0	60	0
Benjamin, 1st quality	340	0	900	0	550	0	950	0
2nd ,, ...	240	0	300	0	410	0	500	0
3rd ,, ...	50	0	240	0	80	0	940	0
Copal, Angola, red	80	0	90	0	70	0	82	0
pale	85	0	95	0	80	0	90	0
Benguela	67	6	90	0	55	0	80	0
Sierra Leone .. per lb.	0	4	0	11½	0	3	0	10
Manilla...... per cwt.	26	0	50	0	24	0	38	0
Dammar, pale ......per cwt.	50	0	60	0	38	0	47	6
Galbanum..................	200	0	210	0	160	0	170	0
Gamboge, picked, pipe	400	0	460	0	250	0	300	0
in sorts	230	0	400	0	140	0	240	0
Guaiacum............per lb,	0	9	2	0	0	10	1	6
Kino .... per cwt.	300	0	500	0	300	0	500	0
Kowrie	30	0	85	0	23	0	55	0
Mastic, picked ...... per lb.	13	6	15	6	8	6	9	6
Myrrh, gd. and fine, per cwt.	130	0	160	0	130	0	130	0
sorts................	70	0	110	0	70	0	130	0
Olibanum, pale drop	70	0	77	6	75	0	86	0
amber and yellow	55	0	70	0	65	0	72	0
mixed and dark..	23	0	48	0	16	0	41	0
Senegal	87	6	107	6	70	0	80	0
Sandrac	90	0	110	0	77	6	100	0
Tragacanth, leaf	200	0	280	0	180	0	260	0
in sorts	70	0	180	0	80	0	160	0
OILS..................per tun	£	s.	£	s.	£	s.	£	s.
Seal	41	0	51	0	40	0	48	0
Sperm, body................	124	0	125	0	92	0	93	0
Cod	47	0	0	0	51	0	0	0
Whale, Greenland	0	0	0	0	0	0	0	0
South Sea, pale......	48	0	50	0	44	0	44	10
East India Fish......	36	0	0	0	30	0	0	0
Olive, Gallipoli ...... per ton	59	0	60	0	51	0	52	0
	s.	d.	s.	d.	s.	d.	s.	d.
Florence, half-chest ..	0	0	0	0	0	0	0	0
Cocoanut, Cochin ..per cwt.	53	0	53	6	42	6	43	0
Ceylon	46	0	0	0	39	6	40	0
Sydney	41	0	46	6	32	0	33	0
Ground Nut and Gin.								
Bombay	50	0	0	0	38	0	0	0

	1866.		1866.		1865.	
OILS—*continued.*	s.	d	s.	d.	s.	d.
Madras ....per cwt.	53	0	54	0	36	6
Palm, fine	42	0	43	6	36	0
Linseed	36	0	37	0	31	9
Rapeseed, English, pale	44	0	0	0	42	6
brown	41	6	0	0	41	0
Foreign pale	46	6	47	0	43	6
brown	44	6	0	0	41	6
Lard	77	0	0	0	60	0
Tallow	36	0	0	0	33	0
Rock Crude .... per ton	£17	0	0	0	£18	0
Oils, Essential—						
Almond, essential ....per lb.	30	0	0	0	0	0
expressed	1	8	0	0	0	10½
Aniseed	9	6	0	0	7	3
Bay ....per cwt.	90	0	0	0	0	0
Bergamot ....per lb.	9	0	13	0	10	0
Cajeputa, (in bond) ..per oz.	0	2¾	0	3¼	0	2½
Caraway ....per lb.	5	0	6	6	5	6
Cassia	7	6	7	7	8	2
Cinnamon (in bond) ..per oz.	1	6	3	9	1	0
Cinnamon Leaf	0	4	0	6	0	6
Citronel	0	3¾	0	5¼	0	4½
Clove	2	8	0	0	0	0
Croton	1	2	1	6	1	6
Juniper..............per lb.	1	9	2	0	2	0
Lavender	2	0	3	3	1	6
Lemon	6	6	8	0	7	6
Lemongrass..........per oz.	1	4	1	6	1	7
Mace, ex.	0	1	0	2½	0	1
Neroli	3	6	4	6	5	0
Nutmeg	0	3	0	8	0	1½
Orange ....per lb.	5	0	8	0	5	6
Otto of Roses ....per oz.	19	0	23	0	18	0
Peppermint, per lb.						
American	15	6	16	0	12	9
English	30	0	33	0	0	0
Rhodium ....per oz.	0	0	0	0	0	0
Rosemary ....per lb.	1	9	2	0	2	0
Sassafras	5	0	6	0	3	3
Spearmint	26	0	28	0	0	0
Spike	0	0	0	0	0	0
Thyme	1	10	2	0	1	9
PITCH, British ......per cwt.	12	0	0	0	12	0
Swedish	0	0	0	0	0	0
SALTPETRE, per cwt.						
English, 6 per cent. or under	23	0	24	3	27	0
over 6 per cent.	22	0	23	0	26	6
Madras	20	6	22	0	25	0
Bombay....................	17	0	21	0	22	0
British-refined	27	0	23	0	30	0
Nitrate of soda..............	12	6	14	0	14	0
SEED, Canary ....per qr.	40	0	48	0	36	0
Caraway, English .. per cwt.	32	0	34	0	0	0
German, &c	32	0	34	0	0	0
Coriander..................	20	0	22	0	0	0
,, East India........	0	0	0	0	0	0
Hemp......................	44	0	46	0	44	0
Linseed, Black Sea..........	67	0	0	0	55	6
Calcutta	68	0	68	6	54	0
Bombay	70	6	0	0	56	0
Egyptian	64	0	65	0	54	0
Mustard, brown....per bshl.	0	0	0	0	5	0
white	0	0	0	0	10	0
Poppy, East India....per qr.	53	0	0	0	49	0
Rape, English	0	0	0	0	0	0
Danube	0	0	0	0	0	0
Calcutta fine..........	56	0	56	6	55	0
Bombay	67	0	63	0	67	0
Teel, Sesmy or Gngy.........	65	0	68	0	53	0
Cotton ....per ton	150	0	160	0	140	0
Ground Nut Kernels per ton	350	0	370	0	250	0
SOAP, London yel. .. per cwt.	28	0	32	0	23	0
mottled	32	0	36	0	32	0
curd	46	0	50	0	46	0
Castile	40	0	42	0	40	0
Marseilles	40	0	42	0	40	0
Soy, China ....per gal.	3	0	3	3	3	6
Japan	0	0	0	0	1	5
Sponge, Turkey, fine picked	14	0	18	0	19	0
fair to good	6	0	12	0	7	0
ordinary ..	1	6	4	0	2	6
Bahama ..	0	8	2	6	0	4
TURPENTINE, Rough, per ct.	10	0	0	0	0	0
Spirits, French	46	0	48	6	58	0
American, in casks	0	0	0	0	0	0
WAX, Bees, English	180	0	185	0	170	0
German	195	0	200	0	162	6
American	185	0	190	0	175	0
white fine	0	0	0	0	8	0
Jamaica	180	0	187	0	190	0
Gambia	180	0	195	0	130	0
Mogadore	140	0	170	0	125	0
East India..............	160	0	190	0	150	0
ditto, bleached	190	0	220	0	200	0
vegetable, Japan	66	0	83	6	65	0
WOOD, Dye, per ton						
Fustic, Cuba..........	150	0	170	0	170	0
Jamaica	105	0	110	0	110	0
Savanilla	120	0	130	0	120	0
Zante	0	0	0	0	0	0
Logwood, Campeachy	165	0	180	0	180	0
Honduras ..	100	0	105	0	100	0
St. Domingo	90	0	95	0	80	0
Jamaica	100	0	102	6	75	0